The Builder.

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THE opening *conversazione* of the Architectural Exhibition took place on the evening of Tuesday last, and was attended by about 700 persons, amongst whom were many ladies and some of the chief members of the profession. Sir Charles Barry, Professors Cockerell and Donaldson, Messrs. Scoles, C. C. Nelson, T. H. Wyatt, Poynter, Lamb, Papworth, and Kerr, were amongst those whom we happened to see. Professor Cockerell, on taking the chair, expressed the pleasure which, as a member of the Royal Academy, and a veteran professor of the art, he had in seeing so large an assemblage of persons interested in the subject of architecture. Such exhibitions as were here placed before them could not fail to have a very important effect upon general knowledge of the subject.

Mr. Ashpitel then gave a sketch of the objects and progress of the undertaking; in the course of which he excused the Academy for the inadequate attention paid by them to architecture, on the ground, as regards their exhibition, that the painter was an exhibitor for the direct object of selling his productions. In adverting to the works now displayed to the visitors, he spoke of the importance of the department of materials and manufactured articles; observing that the architect had a duty supplementary to his calling of artist,—that of preserving the purse of his client,—an object even more than usually important just now, by reason of the excessive dearness of labour in this country. He believed, however, that the promoters of the exhibition were at work towards the prevalence of a general good taste; and in seeking this, they consulted no *cliques* nor parties having peculiar views in reference to the art—confident that the ultimate result of discussion and popular interest, would be the attainment of the real object. He further made an appeal, not quite unneeded, to the representatives of the general press, believing that the objects of the undertaking had been somewhat misunderstood. After alluding to the pecuniary question, and the importance of taking the *balance* from the wrong side of the account—where it has hitherto been—he expressed the hope, that shortly a more suitable place of exhibition, and a more desirable period of the year might be open to selection,—although the requisite premises for the purposes of art should be provided by Government. Were that latter advantage gained, the architect would have a right to a chief place.

After some further remarks by the chairman, and a vote of thanks to the honorary secretaries and the committee, Mr. Godwin, at the request of the committee, moved a vote of thanks to Professor Cockerell, who, he said, was found always ready with his kindly feeling, and his matured experience and scholarship, to aid in promoting the advancement of the art, and there were many members of the profession who owed him much. The speaker said he would take the opportunity to ask for the attention of the public, through those who were present, to the works exhibited, and to the art which these works helped to illustrate. Till lately, indeed even yet, architecture as a study was, it might be said, wholly neglected,—so that people who would have been perhaps ashamed to confess ignorance of other extensive subjects, were not ashamed to plead entire ignorance of architecture,—though the practical architect was one of those who were writing, in enduring form, the history of their time. Hitherto, drawings, where buildings were represented, had required to be mere views, or something pictorially attractive; but it was very desirable that the public should understand and take interest in the architect's ordinary methods of representation, and for the perception of the true pictorial *result*. Information, also, it might be hoped, would become so far diffused, that it would be seen there had been many ways of reaching a beautiful whole, —whilst, as regards the future, our architecture might come to be—if not what was called by the name of this or that old style—at least the expression of original art, working upon all materials, new or accumulated,—whilst it might not be censured, should it perchance be different to all that had been done before.—Professor Cockerell, in conclusion, expressed his belief, formed after an experience of half a century, that our art was passing to an improved position. The productions of the architect had been under disadvantages—placed in conjunction with paintings; and the present Association would have the merit of originating a course of permanent improvement; and he wound up the more formal business of the evening by urging the necessity of full devotion to the art, in order to realize the hoped-for advancement in position.*

We spoke, in our last number, of the general character of the display, and gave the names of some of the exhibitors. We shall now be able to examine the principal drawings. In ecclesiastical architecture the number of works is considerable, by reason of the exhibition of many designs for cemetery chapels. In either these, or churches proper, we cannot say that progress has been made, such as we are glad to recognize in buildings of a different class. There is quite enough in the Exhibition —we may instance the extraordinary display of metal-work by Messrs. Hart—to show how much gain there has been to the general art, by the study of the Gothic principles. But churches continue to present themselves—with an odd exception or two, universally—not simply as "Gothic,"—which might be excusable, or some may say, commendable,—but under a constant *incubus*—as oppressive upon thought and progress, as any ever imposed by absolutism or priestcraft. There are many works exhibited marked by accurate knowledge of old buildings and details: there are those even which show skill in the arrangement of plan, and in grouping; but there are hardly any of the works where the *architect* has not been apparently deferring to some prejudice of his own, or on the part of an employer. Surely, if any fair effort is to be productive of a work of *art*, the mind of the artist must not be under the present trammels,—resulting, be it observed, not from some crotchet in taste, but rather from views originating altogether irrespectively of *art*. That there is the desire amongst architects to do something different from the old models is, indeed, shown by some of the works exhibited: these, however, seem to us to go not far enough: they depart from the beauty of the best old works, only to fall into somewhat of the uncouthness for which there may be also precedent; whilst it would be better just now to start from a different point, —though from one where constant reference should be made to the uses of the structure,—a point which, indeed, we are very doubtful about—as to its being fairly considered under the present system. This view has, however, been continually advanced, both in these pages and elsewhere, of late.

In spite of what we observe, there is still great merit in many respects in some of the designs for churches and chapels in the present exhibition. Messrs. Gabriel and Hirst's "View of proposed Church, Sneed Park, Durdham Down, Bristol" (18), shows a "Decorated" church, with tower and spire. The pinnacles are supported on corbels; and their great height, though required for one object, occasions a defective structural appearance—also not wanting in parts of the ornamentation of the spire. We once had occasion to advert to similar treatment in parts of a design for a more important public building. It may be not without precedent; but what may constitute part of general good effect in works tinged with the flattering hue of antiquity, should not necessarily be repeated. In speaking of ancient *models*, the artist should understand works valuable for the *lessons* which they can afford, and not things that are to stand instead of the results to which modern æsthetics point; and which modern elucidation has its own value, although one hitherto little wrought on. Notwithstanding the peculiarities referred to, however, the grouping of the tower and spire is very good.—— Mr. E. Christian's new church at Tiptree, Essex, shown by plan and views (24 and 355), is a plain, cheap-looking building, to seat 500 persons, at the cost of 1,897*l*. Red brick, with dark bands, and tiles for the roof, are the chief materials, the bell-turret being of wood. The interior has square piers, and a boarded ceiling, simply but tastefully decorated, the roof principals being merely tie-beam and post,—and there is an octagon apse. The design exemplifies a change which is evidently taking place, in opinions as to the proper proportion of length and width. The plan here is square, as indeed are more of the old churches than some authorities once understood. Mr. Brakspear's "Bridgwater Church from the south-east, showing the recent Alterations, and their proposed Completion by the re-building of the Tower and Spire, and the addition of a new Vestry" (46), informs us that the last-named addition will take the octagonal plan, which is most characteristic of cathedral and collegiate churches. The flying buttresses against the *sides* of the spire, form an arrangement which it may have been right to restore; but which again, would be questionable in new works, on the score of structural propriety and beauty. Mr. E. B. Lamb, indeed, adopts the octagon vestry plan, and some of the more doubtful characteristics we are referring to, in his churches, which, however, are all marked by laudable endeavours to enter upon a new path. Some of his churches, amongst the subjects scattered on a sheet and photographed to a small scale by Mr. Bedford, from the lithographs (312), illustrate our remarks. The design which more immediately attracted attention is (47) that of "All Saints Church, Thirkleby, York," recently erected as a monument to the late Sir Robert F. Russell, Bart. where the octagonal vestry roof is crocketted, and the pinnacles of the tower are set inward from the angles.—No. 45 is the "Interior View of St. Mary's Church, Lancaster." This church is remarkable for the beauty of its woodwork, casts of which are at the Architectural Museum. In the case of such exhibited drawings, some information should be given as to the alterations intended,—for, the title in this case is hardly correct in saying "showing the proposed restorations." Mr. E. S. Paley is the architect engaged. ——"The New Parish Church of Blaina, Aberystwith" (49), by Mr. J. Norton, is to accommodate 500 to 600 persons, and will cost about 3,000*l*. and is being built of stones of varied tints. It is in the Norman style.—— In Hatford Church, Berks, to be restored by Mr. J. Brookes, the interior view (58), shows a chancel arch, filled in with geometrical tracery, supported by shafts of red stone or marble.——

* The lighting on these occasions requires amendment. We would also suggest that if "the committee" again "request the honour of the company" of 80 and 90, and *friends*," charges for refreshments should be avoided.

In the large drawing of numerous "works in hand, or recently completed," by Messrs. A. Ashpitel and J. Whichcord (60), there are several churches, chiefly of plain character. Considerable skill is required in combining so many buildings effectively in a drawing.——By Messrs. W. G. and E. Habershon, in "the Baptist Chapel now erecting at Hackney" (73), at a cost of 6,200*l.* the Italian style has been adopted, with a tetrastyle Roman Doric portico; and the interior (77) has an arched ceiling, and a semi-circular apse.——"A Design for a Church" (75), L. De Ville, deserves examination. It is a cross church, with aisles and central tower,—the details being exceedingly simple, and of Italian Romanesque character. There are square buttresses to the aisles and tower, and the latter has a sloping roofed set-off and diminished stage: this upper feature and all the pinnacles being terminated by lofty red-tiled cappings, also square on plan, and by iron crosses.——"St. Stephen's Church, Devonport, in course of erection," of which the south-east view is shown (84), by Mr. J. P. St. Aubyn, is in the Decorated style, with tower and spire; and like the majority of the works exhibited in the same class, is well studied from the old "models," and by no means wanting in effect,—yet withal not displaying much that we could single out as new.——The particulars which the authors of different designs supply in the catalogue, should be very useful to architects visiting the exhibition. We need not copy them all. Mr. R. J. Withers, who is rebuilding the church at Buttermere, diocese of Sarum, adding a chancel (93), informs us that the contract is 450*l.*; the number accommodated being eighty persons,——Of "St. Mark's Church, Albert-road, Regent's-park," Mr. T. Little exhibits an exterior and interior view (101 and 132). This building is one of the best of the architect's works, the site having led to some novelty of effect. The aisles are lighted by two ranges of windows; the upper range being spherical-triangular. The style is Early English. The boundary wall, with ironwork *cheveux-de-frise*, is well managed; but the entrance-gateway is heavy, and challenges inquiry whether it fulfils any use.——Although now confining our attention to new works, we will not pass by the "View of the Church of San Lorenzo, Florence" (105), by E. A. Gifford,—since it is one of the best drawings in the exhibition. It is accurately perspectived and carefully coloured.——Mr. C. Gray's "Church of St. Paul, Tottenham, about to be erected," is illustrated by an exterior and interior view (112 and 113). The design exemplifies the progressive spirit which is to be noticed—with whatever temporary effect—in the efforts of the rising talent of the day. The style, though allied to the Early English, is *founded upon* the Gothic, rather than precisely that which we have alluded to in former remarks as apparently reproduced from old models. The effort after novelty, however, is not carried to excess. The character is given mainly by the use of cusped arches throughout the interior as well as exterior, and of red brick in the window voussoirs. Twisted shafts are used in the windows and porch. There is a circular apse, and that slated spire rising from eaves, which, since Mr. Butterfield erected one in Margaret-street, or since the continental examples have become known, has been a favourite form of innovation upon the usual English character. Square "tabernacles," supported on shafts, are at the base of the spire. The nave arches, cusped, have a slight chamfer, with ornament therein. The roof is boarded and panelled.——In the "Competition Design for the New Church, Peterborough" (124), its authors, Messrs. W. W. Deane and T. Hill, have hardly done their best. The spire would look stumpy, and one buttress belongs to that class of architecture practised in old country churches, when "churchwardens" required "Hints."——We have been much pleased with Mr. S. S. Teulon's Design for the proposed Church of St. Luke, King's-cross (142). Red brick, with dark bands, and stone tracery are the materials employed,—the spire, however, consisting of "a framework of iron, roofed in with slate, having bands of rough plate-glass,—the spirelets of wrought iron, galvanized and enriched with gold." Both tower and spire are octagonal, the former having lofty transomed and traceried windows; the lower stage or base of the tower being of somewhat greater area of plan; and the several faces of the octagon there, being terminated by gables over windows, and pinnacles.——Another of the competition designs for the same building is exhibited by Mr. J. Clarke, F.S.A. (159). It is Early Decorated in style; and the novelty which we noticed, was the crocketting of the upper part only of an ogee-canopy; and that would rather illustrate the danger of pursuing novelty apart from other considerations which are equally important with it.——Mr. J. L. Pedley's exterior and interior views (151 and 153) of Messrs. Scott and Moffat's "St. Giles's Church, Camberwell," also deserve praise as drawings.——The designs for country churches (166 and 171) have surely got their present conspicuous position from other considerations than high merit as designs. We have received many complaints as to the hanging; and though few who make such statements are aware of the difficulty and trouble undertaken by those who kindly accept the duty, there is reason for one complaint, namely, as to the separation of different parts of the same design, in some instances.*——Mr. A. Bailey exhibits another of the designs for the church at Peterborough (176 and 208), and he also uses the slated spire, and the red brick voussoirs to arches,—the latter derived by him, perhaps, from his recollection of the Saracenic architecture of Sicily and Southern Italy. There is good proportion in the tower and spire,—albeit Mr. Bailey's fondness for blank space has a tendency to degenerate into the appearance of poverty.——Mr. Truefitt, in the "Church of St. John, about to be erected at Hulme, Manchester" (198), shows the prepossession for the slated, or lead-covered spire, with clustered lucarnes, and for the unbuttressed wall surface, which he also has. The design has a solidity of character which is highly effective; and which is partly derived from the use of tracery flush with the face of the wall,—but the windows have the appearance of giving too little light. The treatment of the tower and spire is novel and good. Amongst Mr. Truefitt's other works, is a design (197) for a church,—where, in place of ordinary piers for the support of nave arches, short coupled iron columns are used,—set transversely to the length of the building. We notice the influence of Mr. Truefitt's published designs and continental sketches, in many of the executed works of the day.——Mr. T. D. Barry's "Tulse Hill Church" (186), belongs to the other, or what some may call the purer school of Gothic, and we will not take any exception to its merit. That it has,—as in the grouping of the tower and spire.——Mr. R. Kerr, who seems to devote himself to brickwork as a material for the expression of design, has amongst some works which may deserve further notice, one or two ecclesiastical buildings. His "Design in Ornamental Brickwork" (229), shows a church with two western towers, terminating with octagons and tiled spires with eaves. The general subject of brick architecture is too important to be entered into at present; otherwise, Mr. Kerr's works would afford some points for discussion.——Some lithographic views (311-313-316), of St. Patrick's Cathedral, Dublin, show the works carried out by the late R. C. Carpenter, or projected by him for that interesting structure. The woodwork is later in character than the early Gothic of the building.——Rochdale Parish Church (327), one of the late Gothic buildings which are common in South Lancashire, is being restored under Mr. J. Clarke's direction, who exhibits a large drawing of it.——Mr. L. Stride's drawing (330), entitled "Decorative Brickwork applied to the Exterior of a Building without disturbing the Lines of Architectural Design," is a design for a cross church with octagonal tower and spire, with the plain wall surface in yellow and red brick, disposed in patterns. Though these last are excellent in themselves, and do not *constructively* disturb the "lines" of the main angles of the building, and those of gables and apertures, we fear this system of enrichment—expressed in striking colours—is precisely what does disturb the most desirable part of the effect.

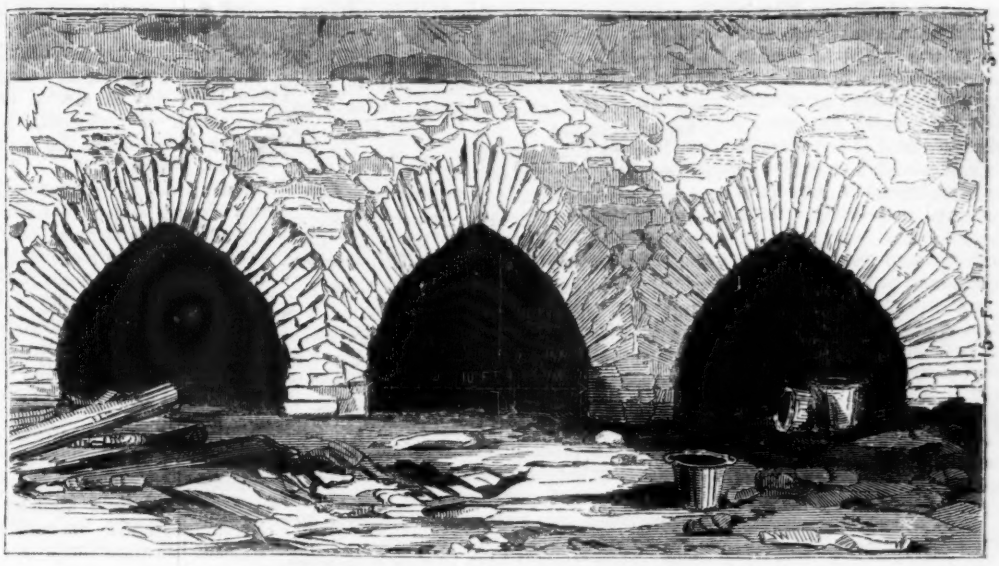
We have not named the whole of the meritorious works in the class of churches; and there are several designs for cemetery and for Dissenters' chapels,—which, with such illustrations as there are of the really valuable part of the architecture of the day—the class of public buildings—with other portions of the exhibition—we must reserve for another opportunity.

* You have so worthily and with so much energy advocated with your accustomed zeal, the cause of the Architectural Exhibition, that I think it cannot be to you otherwise than to some of the exhibitors, a source of extreme regret to observe the great want of judgment discernible in the hanging of the various drawings sent for exhibition. Many designs of considerable merit are placed in positions almost inaccessible to the ordinary visitors to the rooms, while others of very inferior pretensions are hung in the most conspicuous positions. It is not my wish to ascribe to the hanging committee (whoever they may be) any personal or selfish motives, but their incapacity to fulfil the duties they undertook cannot fail of being observed by every person in the slightest degree conversant with the subject. Supposing the statement I have made to be correct, and I have no doubt whatever that it is so, it is obvious that those persons (of whom there must be many) who feel themselves agrieved, who would on future occasions exhibit, will shrink from supporting an undertaking, from which they would expect to derive only unfairness, if not absolute disgrace; and thence would follow the dissolution of a society which possesses within itself, if properly managed, all the requisites to establish a permanent and valuable annual exhibition, calculated to advance in a proper direction the public taste, and at the same time to be of advantage to those who would, in such circumstances, render most willing assistance to the excellent cause.—Veritas. Another correspondent complains with justice of the manner in which some sets of drawings are divided:—"the elevations in one part, the plans and sections in others, instead of being so placed that the various component parts of a design can be seen and judged of *as a whole*. If it is not rectified, it is clear the character of the exhibition will alter, and take the *mere pretty drawing* form, so objectionable at the Academy and elsewhere."

FOREIGN INTELLIGENCE.

The German National Museum.—This recently-founded Museum, and which at present is established in Nuremberg, bids fair to become a sterling affair. By the exertion of meritorious men from all ranks of society, it now already counts 50,000 specimens. The last yearly meeting consisted of men perfectly capable of understanding the wide bearing of such educational establishments on a large scale, as are Messrs. Bergmann, Bluntschly, Förster, &c. The editing of works and engravings was added to the former sphere of activity, and a systematic arrangement of the society laid down. The geographical limits of its activity were fixed within the extent Germany had about the year 1200, the *chronological* epoch to comprise all the ante-Christian times, with the exclusion of the Roman era, except what especially referred to Germany. While last year the Museum had only an income of 2,000 florins, it now reaches already 6,000 florins; and it is hoped that thus the sum of 20,000 florins a year, which would be required to carry out this national undertaking in greatest perfection, will be forthcoming. It is only the four *free* towns of Germany (Hamburg, Bremen, Lübeck, and Frankfort) which have settled a funded revenue on this national school for the people.

Regensburg.—The Dome.—The Royal Villa.—The restoration of the dome of Regensburg is a work of King Ludwig, and it well deserves that attention. Whilst most other Gothic buildings are stretched upwards, which, although it may proceed from strictly scientific principles, creates a sense of limitation and narrowness; here, on the contrary, the proportions of breadth are so mighty, that they counterpoise the former anomaly without encroaching on the



VESTIGES OF THE GREY FRIARS', NEWGATE-STREET.

fundamental principle of Gothic architecture, which is that of an upward elevation. The sculptures of the dome, of the thirteenth and fourteenth centuries, belong to the finest of the period, and prove that domes had always been the nursery of extensive sculpture schools, in Suabia, on the Rhine, &c. If Regensberg presents still the image of a mediæval town, the building of the Villa of King Max will add novelty to its features. It will occupy a place close to the Danube, and is building under the direction of Architect M. Toltz. The plan exhibits a right angle, the sides of which are looking towards the city and the river. The corners of the building consist of turrets, and the fenestration has round arches, and an attic over the chief cornice. This, with one of the finest views, extending up to the heights of the Walhalla, imparts to the building a very serene, romantic character.

Vienna.—New Explosive Apparatus.—The Major of Engineers, M. Ebner, has laid a report before the Austrian Academy of Sciences. It relates to the solving of the question, "whether electricity or voltaism is preferable for the exploding of mines in quarries, &c." The report gives preference to the former, because the amount of effect of the voltaic battery depends on the quality of the conductor through which it has to act; and whenever a great effect (force) is required, the alternative presents itself either to use colossal batteries, or costly conductors, outrunning the usual dimensions.

Munich.—Celebration of Overbeck's Sojourn in Bavaria.—It was the corporation of the Bavarian capital which lately gave an entertainment to the veteran Overbeck. It was observed on that occasion that this great painter never enjoyed nor courted any official patronage, but merely relied on his sturdy talent. When he came as a young man to Vienna, the Academy expelled him as troublesome; and his first works, in the Casa Bertholdi, and the Villa Massimi, he had to make for nothing, thinking himself fortunate that even a bare wall was conceded to him. Now Overbeck is in the possession, not of an European, but of a world-fame.

Saxony.—The Werra Railway Line.—The railway activity in Germany, far from relaxing, increases, for which an ample territory affords a wide scope. There is sitting at Jena a committee on the project of a new line from Weimar through Jena, Gera, Chemnitz to Dresden, which would afford great facilities to the traffic of those lands. But it is the Werra line which has occupied for years the time of the legislatures and engineers. It would transect one of the very centres of German communication, and connect Paris, Basle, Breslau, &c. by the shortest cut.

REMAINS OF THE GREY FRIARS' MONASTERY, IN CHRIST-CHURCH YARD.

IT is to be regretted that so many remains of Old London which, after being buried for centuries, have been brought to light, from time to time, should have been in many instances either demolished, or again hidden from the view, without record. If the city authorities had only applied a moderate sum yearly towards the collection and preservation of metropolitan antiquities, and for the purpose of making drawings and plans of such as could not be preserved, we should, instead of the few fragments at present in the Guildhall library, have had a gallery of antiquities, of which any city in the world might have been proud. Although much has been lost by this neglect, which future historians and persons of taste will not fail to regret, it would be better to begin late than never: let the London corporation only show a little interest in the art-works of bygone days, and many objects of value will, before long, be in their hands.

All means failed to preserve the beautiful crypt of Gerrard's-hall. The materials were presented to the Crystal Palace Company, who, it appears, intended to have put them together again in some part of their grounds: the stones, however, have been lost, or otherwise appropriated. If the city authorities had put it together for themselves, it might have formed an apartment for the preservation of London antiquities. The corporation of Newcastle-upon-Tyne have, at a considerable cost, restored the old Norman castle, and placed it at the disposal of the Newcastle Society of Antiquaries, who have brought together from the adjoining counties, a most valuable collection of national antiquities. Small space is devoted to the British antiquities in the British Museum, and that seems to be too much. The want of a place of proper size and consequence in London for the reception of our antiquities in the metropolis is evident.

Enough, however, of complaint,—a complaint we have often made before. Let us rather continue our endeavours to illustrate and preserve the memory of such portions of underground London as fall before us. When the Grey Friars came to London in the thirteenth century, they established themselves on the north side of what we now call Newgate-street. Here, aided by the citizens, they built first a chapel, then a church, and then again a much larger church,—the latter between 1301 and 1327. In 1539 they surrendered to King Henry VIII. with an admission, willingly or unwillingly made, that their customs were not consistent with "the perfecion of Christian livyng." The house remained in the hands of the king for some time. Just before his death, he provided that the church of the Grey Friars should become the parish church of "Christ's Church within Newgate." Passing rapidly on,—when Edward VI. was moved by a sermon from Bishop Ridley to do something for the poor of the City, with the co-operation of the citizens the old conventual buildings of the Grey Friars were repaired and set apart to rescue, feed, clothe, and educate destitute children; and Christ's Hospital was founded. In 1553, the children, in a livery of russet, were received into the place.

The good example of Edward VI. was followed from time to time by his royal successors. King Charles II. founded a mathematical school and ward for the instruction of forty boys in mathematics, especially in that part of the science that respects navigation, and liberally endowed it with 1,000*l.* per annum, paid out of the Exchequer for seven years, for the founding thereof.

Sir William Chester, knight and alderman of London, and another citizen of the same city, at their own charge, made the brick walls and way on the back which leads from Christ's Hospital to St. Bartholomew's, and also covered and vaulted the town ditch from Aldersgate to Newgate, which was before very loathsome and infectious to the said hospital.

We must not neglect to mention, that when the hospital was erected and put into good order, there was one Richard Castel, *alias* Casteller, shoemaker, dwelling in Westminster, a man who was very assiduous in his craft with his own hands, and was called the Cock of Westminster, because both winter and summer he was at work by four o'clock in the morning. This man, thus steadily and honestly labouring for his living, purchased lands and tenements at Westminster, worth 44*l.* per annum; and having no child, with the consent of his wife, who survived him, gave the same lands wholly to Christ's Hospital, and for the "succour of the miserable sore and sick harboured in other hospitals about London."

Sir John Moore, in 1694, was also a benefactor to Christ Church: he built the writing-school at a cost of 5,000*l.* Wren being the architect. After the Fire, Sir John Frederick, alderman of London, built the great hall, at a cost of 5,000*l.*

Chamberlain says:—"On the north side of the cloisters are two doors: one opens into the town ditch, which is now a fine open area, with several good houses built and well inhabited: the other opens a way into St. Bartholomew's Hospital and Smithfield; and close to this door or gate, on the west side, is a burial-ground, where are interred such as die in Newgate, &c. The principal gate into this hospital is on the west, and almost at the south-west corner of

the old building, from the court which to this day is called the Grey-friars. In Queen Mary's days there was in this place a stinking, loathsome dungeon, where it was usual to confine and punish vagabonds; and in the Marian persecution, it served for the imprisonment of such as fell under the displeasure of the popish ministry, amongst whom we read of one Thomas Green, servant to John Wayland, a printer, who was confined and cruelly whipped in this dungeon, for being concerned in printing a book called 'Antichrist.'

Returning, however, to the present. On the north side of Newgate-street some new houses are being erected; and in the course of excavating for them, three arches, as shown in our engraving, were exposed under Christ-church Yard. They are 10 feet in span, and are covered with masses of chalk and concrete to within 3 feet of the surface, the rest being earth.*

We have here, of course, some vestiges of the old buildings of the Grey Friars', and, as such, have thought it desirable to preserve a record of their appearance and position.

THE LATE MR. ARTHUR JOHN GREEN.

We have to announce with great regret the very sudden and unexpected death of a most amiable man and very promising young architect, Mr. Arthur John Green. He was in his thirty-fifth year, and though he had complained of slight indisposition for a few days, there was nothing that gave his family or his physician the least uneasiness. He was looking extremely well, and was at a small family dinner-party on the evening of the 12th instant, when in a moment he was seized with hemorrhage of the lungs, and died instantly.

Mr. Green was articled to his maternal uncle, Mr. W. Tite, M.P.; and after completing his studies in London, travelled for some time in Italy and Greece. On his return home he was appointed to personally superintend the works of the new Royal Exchange, then building. In this and in the other extensive engagements of his near relation he was employed for some years, during which period he filled the office of honorary secretary to the Wykeham Society; and in that capacity made some communications, which were much admired at the time. Some of the illustrations in the "Architectural Dictionary" are from his drawings and sketches.

A few years since, Mr. Green commenced business on his own account, and soon obtained the appointment of architect to the East-India Company, and surveyor to the Globe Insurance. For the former he was engaged in considerable works at the time of his lamented death. Mr. Green was a good scholar and linguist, an amiable and excellent man, and a charming companion: his death will be deeply deplored by a large circle of friends and contemporaries. He was buried at the Norwood Cemetery, in a vault under the Episcopal Chapel, on the 19th inst. and his funeral was attended by many members of the profession.

THE LATE MR. J. W. GRIFFITH.

We mention, with great sorrow, the death of Mr. John William Griffith, of St. John's-square, which occurred on the 27th of November, — a worthy member of the architectural body, and a good man. Although in the profession for half a century, he was never led to place himself prominently before the public.

He was surveyor to the parish of Aldersgate for some years, during which period he added to and decorated the Church of St. Botolph. Amongst other competitions, he obtained the Islington parochial schools, which were designed and erected by him, and in that parish, in Hornsey, Highgate, Kentish-town, and in various parts of the country, he erected numerous villas and houses, from the year 1816 to the time of his decease.

He was for many years surveyor to the London estates belonging to St. John's College, Cambridge; but he will be better remembered for his benevolence and kind heart. His sons have made the name more widely known.

* For the materials from which the sketch was made, we are indebted to a correspondent, "R. S. T."

ON FORM, LIGHT, AND SHADE IN ARCHITECTURAL FOLIAGE.

It is a mere truism for me to say that the formation of a collection such as is found in the Architectural Museum, cannot fail to be of great use to the art-workman; but there may be such a thing as his not knowing sufficiently well how to take advantage of it. He may continue studying and imitating the mere form, and acquire an aptitude in copying some of the most beautiful works which he may see around him, but without proceeding upon any other principle than that of simple imitation,—following merely that which has been done already.

But this is not the proper use to make of this collection. I conceive that it is altogether beyond this, for here we see around us beautiful examples of what has been done in ornamentation in times long passed away; and the use we should make of these is not simply to copy them, but to proceed onwards from the point at which they have arrived. To stand still as if we had reached perfection, and only to copy and rearrange old materials, no matter how beautiful, is to go back.

The object, then, I have in view is to endeavour, to the best of my ability, to point out the manner of studying and observing architectural carving, with reference to the principles of form, light, and shade. In order, however, to study for real improvement and advancement in his art, the carver must also at the same time study nature. For nature is the source of all beauty, and modern carving, carving of the nineteenth century, should not be a *literal* copying of any particular style or example. We may adopt the principles and conventional treatment of any, but it should be drawn fresh from nature. It may be rendered in a variety of ways; every artist may have his own particular style, or it may be rendered in the conventional manner of the early English period, or the Decorated, or it may be in the Greek or Roman manner. But whatever is done, in whatever style, it should partake of that life and beauty which we see in nature. But a person may say, "How am I to find this beauty in nature? You say I must not *copy* nature. What is the use of telling me to go into the fields, and into the woods? I can see nothing particular there,—in fact, I do not see of what use it is. Put a piece of carving before me, and I can understand that; I can admire it, and learn to copy it."

No doubt you can. But what is the value of a mere dead copy? We can admire the original, because we see the man's mind through his work; but in the copy we can only admire the original through the copy: the life of the original is vanished, and nothing belongs to the person who made the copy except his mere mechanical skill. But the copyist may say, "I do not see how to obtain assistance from nature: what is there in thistles, and docks, and buttercups? I can see nothing in them that is beautiful, and they are not very beautiful to the farmer, who would be glad to exterminate them all." What! Can you not see beauty in these lowly outcasts, nature's homely clothing? No beauty in the thistle, with its sturdy stem, its varying form of leaves, its beautiful variety of light and shade? Look at its flower, set like an amethyst among its green ray of spines. And the common creeping crowfoot, too, that pest of the farmer, that insinuates its roots unseen beneath the ground to throw up its elegantly formed leaves in every vacant space, to teach a simple lesson of beauty. We see not the elegance in these homely things, because we look at them as if we were blind. * * * *

Nature teaches us a useful lesson in decoration, for where she is not prevented by man, she enriches and decorates nearly every portion of the earth with beautiful foliage of some description or other, while we extend our miles of brickwork, covered with nothing but a monotonous coating of dingy-coloured cement, with nothing but long plain-run cornices, architraves, and facias, which we term decoration. Why do we not imitate nature in this, and cover some of our plain spaces with some species of design taken from the vegetation of nature? Instead of imitating colossal blocks of stone by scratching a few lines on the surface, how much more elegant it would be, and what an agreeable relief to the eye, if the plain surfaces were enriched by some simple flat application of natural foliage. In quoins of buildings, arch and keystones, instead of picking them out in careful and elaborate representations of rockwork, how many pleasing arrangements might be made in well-conceived foliated design.

In classic architecture, the artist, in designing foliage, seldom refers to nature. He looks upon Greek foliage as the perfection of architectural foliage, consequently he rests satisfied in taking it as he finds it,—merely copying, or at the most recombining and rearranging, until we see Greek honeysuckles in every possible situation, and the anthemion ornament made to answer every purpose, from a frieze to an iron railing,—enriched ogees, cymas, egg and tongue, and bead and button, used over and over again by the aid of the plaster caster, from one end of London to the other, without the remotest attempt at improvement.

They are looked upon as perfection, and any alteration would be considered as sacrilege. Cement has spread over the whole of our island like a plague, and the same plasterer's moulds appear to be used in every town in the kingdom.

There are but few rules which can be laid down for the treatment of foliage,—such as I know I will endeavour to explain,—but it is the beauty, the thought, the feeling which must be sought for—there are no rules for these; these must be brought out by study. The student must go forth, as the poet says, into—

> "The populous solitude of bees and birds,
> Those fairy fram'd and many colour'd things,
> Who worship Him with notes more sweet than words,
> And innocently open their glad wings,
> Fearless and full of life; the gush of springs,
> And fall of lofty fountains, and the bend
> Of stirring branches, and the bud that brings
> The swiftest thought of beauty." *Byron.*

Flowers and foliage are among the most beautiful objects in nature, and have all the requisites which pure and true, or perfect art should have, colour and form, with light and shade. Now, the carver has little to do with colour, except as it exists in the colour of the material itself, upon which he is working: his art, therefore, is so far simplified; he has, after form, which is of the greatest importance to him, merely to study light and shade.

Form is often made use of without light and shade, merely developed by the aid of two colours, as in flat painted diapers, encaustic tiles, and the like, and very beautiful combinations may be formed in this way. In a similar manner this is also carried out in carving, the form being developed simply by sinking the portions between the ornament, that is, the ground, below the surface of the stone. This mode of ornamentation is common in Romanesque work, and often the interstices are beautifully filled in with coloured marbles. The graceful wall diapers from the Alhambra, are carved in this manner, the surface ornament gilded, and the recessed portions filled in with colour. The Grecian fret is upon the same principle. This may be considered the most simple of all carving, as it depends entirely upon its form, the shadow being simply for the purpose of producing a different tone or colour to develope the form, in the same manner as in tiles one colour is used merely to develope the form in the other. Now, although great beauty may be produced by this simple mode of recessed surfaces, yet this cannot be called perfect carving, since it consists almost entirely of form, with very little assistance from light and shade. But it serves most particularly to show one thing, that there is great beauty in mere form.

But there is the opposite extreme; we may have carving which is nearly all nothing but light and shade, with scarcely any form. The most perfect carving is that which embraces and amalgamates both these extremes in the greatest degree, without destroying the good effect of either. The most perfect carving is that which developes the greatest amount of elegant form, with the most perfect light and shade. It shall not be so flat as to give only bright light, and deep shade, and not so enveloped in light and shade, as to lose

the beauty and simplicity of the forms and outlines of the foliage. There is such a thing as producing in carving, agreeable and disagreeable light and shade, that is, that the forms of the foliage may, although good, be so arranged as to produce a bad effect when viewed from the distance intended. The high lights may too much over-balance the shadows, or, as is more frequently the case, the shadows may be so numerous as to completely destroy the lights, and therefore producing nothing but blackness.

In modern carving the outline is often very slightly attended to, and the workman, in order to get boldness, thinks that he cannot cut up the surface of the leaves too much. This is a mistake that cannot be too strongly pointed out. In striving after effect, the modern carver fills his leaves with innumerable lines, and when he observes that they produce but little effect, he proceeds to cut some of them in much deeper, which, by destroying the lights, probably only makes the matter worse. This is a mistake, too, which is not confined to the workman of the present day. I was observing a short time since the carving in the interior of St. Paul's Cathedral. Some of the bosses there in the ceiling, are so cut away, and are so full of minute parts, that they look but masses of shadows. There is plenty of shade in them, but very little light.

The guilloche in the arch bands, which is in connection with the bosses, shows by contrast how well ornament looks when properly relieved by shadow; for here, simply by the ornament being surrounded by shade, it comes out boldly and effectively. The same fault may be observed in the acanthus-leaves of the Corinthian capitals; they are so full of lines that they are completely put in shade. It is a very beautiful leaf when seen on paper, and you have the advantage of seeing it as closely as you choose; but place it 30 or 40 feet high, and its effect is lost. The innumerable lines upon its surface produce, at the distance from which it is viewed, quite a dark tint, having anything but the effect intended. Thus, when the capital is made up of such leaves, you have a mass of intricate lines all in shade, with scarcely room left for the play of a single light broad enough to be seen from below.

In the architectural foliage of the best periods, the outline of the leaves and general or leading lines in the design were carefully attended to and studied, as in examples which may be seen from Southwell Chapter-house, the stalls at Winchester, &c. casts of many of which are in the Museum. The surface carving upon the leaves was made quite secondary, and never sufficient for the light and shade upon the surface to destroy the outlines. But in later and in modern work, things are completely reversed, the outline is lost in the depth of light and shade produced on the leaves themselves. Carving should always have a rich sparkling effect, and to produce this, you must have some sharp high lights. I would say, avoid lineyness or weediness. Remember that the high lights require a sufficient amount of breadth, regulated according to their position, to make them tell. It is of no use to get a great amount of depth and shadow without light. The light and shade should be studied in the same manner that a painter studies them in a picture. First, the broad masses; next, the breaking them up by secondary ones, but taking care not to interfere with the general breadth; and, finally, the minute picking out of the smaller parts, giving richness and finish to the detail and variety and tone to the whole. There must be harmony of form and harmony of light and shade, arranged with order without confusion, yet with negligent freedom and without stiffness. The carver should constantly keep in view the height at which his work is intended to be placed; it must necessarily follow, that an ornament, if intended to be placed 30 feet high, should have fewer lines than when placed near the eye; and also, if intended to be placed 70 or 80 feet high, it should have fewer lines still. The want of attending to the simplification of ornament when placed at a height, is one reason why the carving has so little effect in St. Paul's Cathedral. There is the same fault to be seen in many other modern buildings. And why is it? It is simple enough: for upon the most common law in optics, those things appear smaller the farther they are removed from us; and as all ornament in a building is designed to be seen from the ground the higher it is up, and the more it is removed from us the smaller it becomes, therefore the more it should be simplified, upon the same principle that we should leave out a great number of the lines if we were making a drawing of it upon a small scale.

The treatment will also require to be different for the interior of a building to what it is for the exterior, for the reason that we have less positive light in the interior of a building. Sometimes in vaulting and groining there is but a very feeble light. In such cases the ornament should be of the very simplest character; the foliage should be simple, but extremely bold, producing what would be in a strong light extreme suddenness, that is, plenty of relief and undercutting of the foliage, so as to gain, in the absence of a perfect light, as much contrast as possible.

When a carver places a piece of carving before you, he takes care to put it in as good a light as possible; but remember what light it is to receive, and the height at which it is to be placed when it is put in its position, and let it be designed to have the intended effect, when placed in its situation. This is one of the most important studies in the carver's art, and should never be lost sight of. The kind of foliage, too, which will suit one material will not suit another. For instance, if the stone be a very rough one, such as a coarse sandstone, the design must be very much simplified, and the light and shade be made more sudden; while in a fine material, as white marble or alabaster, if the same treatment were followed, the foliage would have a crude and unfinished look. In the rough stone minute shadows exist, from the inequalities of the material, even in the brightest lights, which considerably reduce the amount of contrast between the complete shade and the high lights; but in the fine material none of these exist; the high lights are therefore much brighter than in the coarse stone, consequently, an undulation and breaking up of the surface of the foliage is often necessary to soften the high lights, and to produce a more harmonious tone in combination with the shadows. A difference in the outline is also often necessary when without a background, as when placed against the sky. Small objects against the sky are usually seen dark, and their outline is most distinctly seen. This is also the case when only without a background, but of course in a lesser degree. The outer form will therefore require great care and study, while surface-carving will be scarcely at all required. Great distinctness and simplicity is indispensable to its good effect; it therefore becomes a matter of great importance to determine the exact size and form of crockets and finials, and the distance they should be placed apart; also the form and size of gable crosses, and what amount of carving should be introduced upon the surface.

Many of the old crosses are perfectly flat, and depend entirely upon their form for their effect. In some, carving is introduced upon the surface, but it is generally lost.

It should be remembered that the smaller an object is when opposed to the sky, the darker it appears; directly you increase its breadth you can begin to see light upon its surface. This may be seen in a spire very distinctly when it has a bright sky behind it. In the upper part it will be difficult to distinguish anything but the outline of the finial and upper crockets, while down below, near the base of the spire, everything upon the surface, with the foliage of the crockets, will be easily seen. Artists, in tinting views of churches, take advantage of this, and usually make the upper part of the spire darker than the lower. Small objects, being darker when opposed to the light, may be detected in another way: for instance, if you are in the interior of a building, and you catch a finial or other small object, having one of the openings of the windows for a background, it will look perfectly black, and you will distinguish nothing but the outline; but move your position, so as to bring the object against some of the dark shadows of the building, and the finial will become light, and you will see the light and shade of the carving upon it.

This, then, is a fact that should be remembered when engaged upon carving, which is to occupy such positions. This also applies to ironwork, such as crestings, vanes, and such like; work upon the surface of such portions being merely so much labour lost, as the piercings and general form are usually all that can be seen.

The form and arrangement of foliage, more especially in Gothic architecture, are often very skilfully based upon geometrical figures, as the circle, triangle, square, pentagon, or hexagon; the leaves themselves also are sometimes geometrical in form. The form is often suggested by the enclosing lines; for instance, in small spandrils, the space being triangular, nothing is more natural than to adopt a triple arrangement. The hollow of a moulding suggests a square flower or leaf.

The intersection of the ribs of panelling, as in ceilings, gives rise to the square boss or rose, so well known as belonging to the Perpendicular period. The Tudor rose also is a familiar example of the use of the pentagonal form. Nor is such treatment at all inconsistent with nature. Geometrical forms are constantly found in nature most surprisingly perfect. The artist, however, must beware of falling into this treatment to too great an extent. This was one of the great mistakes which the carvers of the fifteenth century fell into. They cut their carvings to the very lines, which gave a certain stiffness to most of their work; one may even call it primness—like persons when they are too particular in the arrangement of their dress: everything must be cut to the exact line—neither over nor under. This precision is one of the main causes of the loss of that beauty which they would otherwise most undoubtedly possess; for we have had some most masterly carving handed down to us by artists of this period, especially in woodwork, as may be seen by the many excellent casts of wooden panelling in the Museum. Foliage was constantly geometrical in arrangement during the previous periods, but it was more as in nature; it often overstepped the line, and purposely varied the form which obviated that prim effect, and prevented the geometrical lines from becoming too apparent. A beautiful mode of composition of ornament is by radiation, or the star form,—that is, radiating from a centre, as in flowers. The end of the lilac branch, when viewed upon the top, gives a very good natural composition in this manner of four leaves; very possibly this may be the natural type of the four-leaved flowers of the Decorated period.

This arrangement in the lilac arises from the plant bearing what is called opposite leaves, and may be seen again in the maple, and other plants which bear leaves in this manner. One of the most elegant arrangements, and which was at all times a favourite one in the Classic as well as in the Gothic, is that of arranging the stems of the foliage in graceful spiral lines. This was perhaps carried to the greatest perfection during the Early English period. In continuous mouldings in the Norman and Early English periods the zig-zag arrangement was a common one. In the later styles this was softened into the wave line, and double scroll or spiral, and gave scope for excellent varieties of arrangement, which was often beautifully carried out in the hollows of large mouldings. The foliage of capitals of the Early English period was arranged often in the zig-zag manner with good effect, that is, the bunches of foliage were arranged alternately up and down, although all spring alike from the necking. In selecting leaves from nature for the purpose of carving, the most simple of all leaves, the common heart-shape may be often used most artistically, but usually those are best adapted which are compact and regular in their form, and are cut into deep bold lobes,—as the ivy, maple, vine, and such like. The triple leaves are also beautifully formed leaves for the carver's purpose, such as the clover, crowfoot, hepatica, and water avens: the last is said to be the type of the foliage of the thirteenth century, and was anciently called "herba benedicta," or holy herb. The triple principle is most beautifully seen in the common single parsley. It is a very compound leaf, but all the divisions are in

trees. Some leaves are perfectly irregular, as, for example, the oak and hawthorn, and are more difficult to arrange in an agreeable manner than those which are regular. I do not know any leaf which is more difficult in this respect than the oak. But in rendering foliage from nature, the carver must be very careful how he follows some of the intricacies which he finds in nature. It is perfectly legitimate to omit the more minute parts and cuttings,—leaves may be made more regular and uniform if it suit his purpose, or the position his work is intended to occupy.

For boldness of treatment and masterly effects of light and shade, perhaps no foliage has ever equalled that of the Early English period. The general lines are usually very good and full of elegant drawing,—but in the foliage, the leafage itself, there is a sameness, a want of that beauty and variety in the forms which we see so happily developed in the style which immediately followed it,—that is, the Early, or Geometrical Decorated. Here, although the leafage is beautiful, there is sometimes a neglect and a want of decision in the leading lines, and later in the style we lose nearly all the general or leading lines in the very abundance of the leafage. In short, in the Early English, much of the beauty was in the treatment of the stalks of the foliage, which were arranged in a graceful and elegant manner; in the Decorated, the stalks were partially lost, and the leaves became most marvellously developed. In the later Decorated there was a great richness and fulness—a bossiness—in the ornament; but frequently a neglect of outline. Some of the finest carving of this period is that from the Percy shrine, and the adjoining altar screen at Beverley Minster.

In conclusion, I would impress upon all the necessity there is for improvement and the cultivation of a better taste in carving and decoration generally; for is it not lamentable when we look around us and observe the gaudy patterns of our carpets and room papers,—the miserable carving on our furniture and picture-frames? What can possibly be in worse taste than some of the elaborately gilded frames of our showy looking-glasses? yet these things all find ready purchasers, plainly indicating that the public, even among the humbler classes, have a decided taste for carving and decoration; it only requires correcting and educating in a proper manner.*

James K. Colling.

PROVINCIAL NEWS.

Winchester.—The additions to the barracks here are progressing. With regard to the new hospital, a Hampshire paper states that it is the intention of the Board of Ordnance to purchase a piece of land in St. James's-lane, whereon to erect it. The contract for the building of it has been taken by Mr. Bull, the builder of the new gaol at Southampton. The whole of the alterations will not be completed under two years and a half.

Tunstall.—The authorities here have authorised the preparation of drawings and estimates for alterations to the town-hall, on a plan proposed by Mr. Robinson, the architect of Burslem new town-hall, according to which almost the whole of the present outer walls will be removed, and various other works done, and the exterior rendered more architectural in appearance by the use of cement; the whole cost to be 300*l.* to 350*l.* The architect does not think it advisable to expend a larger sum on the present building.

Pembroke.—It is rumoured that permanent barracks for 5,000 men are to be erected here. The ground, it is said, has been purchased.

North Shields.—At a recent meeting of the town council of Tynemouth, it was unanimously resolved to forward memorials to the Lords of the Admiralty and the River Tyne Commissioners, in favour of the proposed North Shields and Tynemouth Dock. The proposed dock will now, instead of running from a south-east angle from Clifford's Fort to the Black Middens, commence at the north-east end of the fort, thereby, it is contended, removing all possible danger to the shipping in harbour.

Edinburgh.—Various improvements in Holyrood Park, according to the *Scotsman*, are about to be carried out, comprising,—in addition to the new approach from Abbeyhill to the palace and park, for which 1,000*l.* were voted last session of Parliament,—a great extension of the palace garden-ground, the formation of a small loch or serpentine in the low marshy ground below the ruins of St. Anthony's Chapel, the erection of two lodges of stone at the park entrances, and other improvements. A carriage-drive is also to be formed through the park to Duddingstone and Portobello.

NEW MUSIC-HALL, COVENT-GARDEN.

Our engraving represents the singing-room of a tavern, neither more nor less,—the singing-room attached to what is widely-known as "Evans's Hotel," though now in the hands of Mr. Green,—and is surely an evidence of progress. It has been built from the designs of Mr. William Finch Hill. It is 72 feet long, forming, with the old room, through which it is approached, a music-hall 113 feet in length, and 56 feet in width. The new room is formed into three divisions by columns and arches: the clear width of the central compartment is 33 feet: the height from the floor to the ceiling is also 33 feet. One of the side aisles has a gallery, under which are arranged some of the necessary offices. The columns between the nave and aisles, let it be noted, are of Bath stone, fluted, with wreathed Ionic caps and Bath stone entablature. Over each of the eight pilasters there are figures modelled in plaster, representing Poetry, Drama, Music, &c. The ceiling is executed in plaster, with octagonal coffers within square compartments, the four centre octagons being perforated for ventilation. The columns upon the orchestra (which is formed at the end of the room), as well as the moulding round the various arched recesses, are to be executed in scagliola. Colour on the whole of the ceiling and walls is to be brought to aid the effect, in connection with which several surfaces are left plain for arabesque ornaments. The coved octagonal coffers of ceiling are to be painted to appear as those perforated for ventilation in the centre. The lighting is effected by ten cut glass gaseliers, with 120 lights, and a range of jets running round the main cornice for ventilation. The cold air is admitted from a series of descending shafts to a channel under the floor running all round the hall, containing four hot-water pipes, and thus passes into the room, warmed; the vitiated air passing off through the apertures in the ceiling into the roof, which has open louvres, round the entire length upon each side. The total cost of these works, including certain alterations in the hotel, will be nearly 7,000*l.* This hall, which may fairly be called a very handsome one, was opened to the public, upon Monday, the 10th instant, having been completed through the exertion of the contractor, Mr. W. Jackson, within four months from the date of the contract, notwithstanding many difficulties to be contended with, amongst which may be mentioned the excavation; and the necessity for underpinning the adjoining properties; the floor line of the new hall being about 14 feet below the old surface level.

The object was to open the room during the week of the Cattle Show, when a large proportion of the provincial visitors think it necessary to go to "Evans's." On the present occasion, the number of visitors averaged, we are told, about one thousand a night.

Messrs. Hood and Son put up the hot-water apparatus; Messrs. Defries and Son, the glass gaseliers; Mr. Jeakes provided the cooking apparatus; Mr. Bentley the pewterer's work; and Mr. Remmington the gas fittings.

The house was originally built for Russell, Earl of Orford, who, as Admiral Russell, defeated the French fleet off Cape La Hogue, in 1692. The staircase, a fine one, is formed of part of the vessel Russell commanded, and exhibits in the carvings anchors, ropes, and the initial letters of Lord Orford. James West, the great collector of books and prints, lived here. At his death, the collection was sold, and occupied the auctioneers six weeks. The sale commenced, March 29th, 1773. After the sale, the house was used as an hotel, when the first family hotel in London was established in Covent-garden, in 1773, by a person of the name of David Low.

About 1790, Mrs. Hudson became proprietor, and advertised "stabling for one hundred noble-men and horses." Mr. Richardson succeeded the above. Mr. Joy followed; and the late Mr. W. C. Evans, of Covent-garden Theatre (who died in September, 1854), resigned it into the hands of the present proprietor in 1844.

Several actors have been inhabitants of this house. Amongst others, "Little Knight," as he was called, and Mr. Charles Kemble: it is even asserted that Mrs. Fanny Kemble was born in the room which forms the gallery to the new Music-hall.

We may add to these memoranda concerning Evans's Hotel, that the Institute of British Architects held their meetings here when first established: here the first medal awarded by them was presented by the president, Earl de Grey, to the successful candidate in 1836.

THE DIPLOMA QUESTION.

In your last number you have inserted two very able letters on this subject, the arguments in which seem to me to fail, from the very cause suggested by Mr. Tite during the recent discussion, namely, "ignorance of the kind of diploma sought for." Messrs. Kerr and Tarbuck, without absolutely stating it, evidently imply that the object desired is a *compulsory* examination, and this impression seems to be shared by Messrs. Pocock, I'Anson, and Burnell. I have also heard it stated, that the present agitation for a *voluntary* examination is nothing more than a preliminary to an agitation for a compulsory one, for which the voluntary system will be taken as an instalment. I am not now raising a giant for the purpose of slaying it, because I am quite certain that this monster exists, invisible perhaps to mortal eyes, but with a presence and club very perceptible. To make therefore the diploma a matter of legal enactment, a sort of bill of pains and penalties for protection to British architects would obviously defeat its own object, besides being unjust and tyrannical towards the public. On this very important starting-point, I am quite sure Mr. Tite, Mr. Papworth, and the young memorialists, agree. Then I have often heard it argued, that a voluntary examination may become so general, so popularly received a method of testing an architect's qualifications, that this examination will become a professional necessity, and therefore a moral tyranny, if not a legal one. I hope it may be so, with all my heart. A tyranny of knowledge and capacity, progressing and developing itself only by its own justly appreciated value, and totally unaided by any compulsory enactments, would be a great and glorious thing of which any profession might reasonably boast. When Mr. Tarbuck complains of "special pleading," I cannot help referring to some of his own. As is useful in such cases, he defends the present system by referring to the great men who have flourished in spite of the system; but even these he refers to times not in the least analogous to our own. His illustrations are singularly unfortunate. When Giotto, "raised that fair tower," he was the great painter of his age, and the *only* Florentine architect, Arnolfo, was in his grave; Orcagna, Taddeo Gaddi, and Niccolo di Pisa, unborn, or in their infancy. He therefore required no diploma to make his genius recognised. William of Wykeham held a confidential position near his sovereign. Could he fail in finding employment for his talents? Had "the stern and lofty Angelo" lived in these days, neither "pontiff nor prince would have stood uncovered;" but he might have been considerably bullied by an English House of Commons. It is worse than idle to measure the wants and opportunities of the present day by a mediæval standard.

The Brandenburgh Gate, "the pride and boast of Berlin," (?) was erected before the present Prussian diploma system was established. That argument, therefore, falls to the ground. "The Berlin programme," says Mr. Kerr, "scarcely deserves to be carefully perused." I fancy he forgets that the Berlin examination is part of that very collegiate system of education which is his own dear hobby. Nay more, his own programme of "a little practical science easily taught," does betray a most singular resemblance in its requirements to the Prussian one. Talk of German mystification! the English *Ego* and *Non Ego* have a strong family likeness. The great blot in the Prussian examination seems to be the fallacy of connecting a diploma with any particular system of study. Hence the objection of "tyranny of schools," which has been so often thrown in our

* Read at the Architectural Museum, Cannon-row, Westminster.

NEW MUSIC-HALL, COVENT-GARDEN.——MR. W. FINCH HILL, ARCHITECT.

test; but this very tyranny forms a prominent part of Mr. Kerr's system. For the establishment of an extensive system of architectural collegiate education I am as great an advocate as Mr. Kerr. This, if combined in due proportion with the present office system, would prevent practice from degenerating into English "rule of thumb," and theory from mounting into German transcendentalism. To establish a system of education is, as Mr. Kerr well knows, no easy task. He has been labouring at it for years; but, as yet, with no results. To set on foot a voluntary examination is a comparatively easy matter. "But," says Mr. Kerr, "you begin at the wrong end. Qualify your candidates first; then get them an examination." Now, if the present body of candidates for examination be not sufficiently qualified (and that is more than possible), what will exhibit the fact better than the proposed examination? and then Mr. Kerr has a stronger argument than ever in favour of a more extended system of education.

There appear to me to be many and grave reasons why a diploma examination should be totally independent of any educational system. That a college should grant certificates, prizes, or honours is undoubtedly right, but these are simply incentives to study: they are the "little goes" preparatory to the great one; but to no college would I give the power of granting a diploma. An independent examination would be most valuable as a test of educational systems. The upholders of the present office pupil system are both numerous and respectable: an independent examination would show if the views of these gentlemen be right or wrong.

Another reason for entirely disconnecting the diploma and the college is this: the former would act as a most salutary check on the latter. In all educational establishments abuses continually creep in: the diploma would tend to expose these. Again, experience has told us that there are many men

educated on a bad system who have attained great knowledge in spite of it, and, as Mr. I'Anson observed, there are even instances of men who have obtained their knowledge heaven knows where, but who undoubtedly possess it. To neither of these classes should a diploma be refused: to neither could it be given if it were connected with any educational system.

In the true spirit of "special pleading," both Mr. Tarbuck and Mr. Kerr have insinuated that a diploma is by its advocates set forward as a remedy for every evil of the present system; in fact, that a diploma will make an architect. I need only refer to Mr. Papworth's recent remarks to settle that matter.

A very grave impression seems to have gone abroad that the Architectural Association have undervalued the qualification of professional experience. I am very anxious to remove this idea. The practice which experience alone can teach, no diploma can touch, but the theory, without which experience is only a mockery, may form a fitting subject for an examination.

With these views alone, the memorialists have, I think, not inopportunely, and I hope not disrespectfully, presented their petition to the Institute.

Alfred Bailey,
President of the Architectural Association.

Suppose it settled that we are to have a diploma (which, by the bye, we shall not have, or anything so useless), how are *we* to be dealt with? One of us is a first-rate hand (excuse vanity) at the artistic part of the profession, but knows *nothing* of the practical part: the other is a capital practical man,—in fact, once a bricklayer, then a clerk of works, a builder, and now "architect," but cannot even handle a pencil. The former is certain of passing one half of the examination, the latter of getting through the other half. We can point to works executed, well carried out, and of good design, so of course we shall each be entitled to *half a diploma*. What say you, Mr. Editor?

Yours, &c. Jones and Jones.

P.S. By the bye, if the members of the Architectural Association were individually asked to agree to be examined, we wonder how many would become candidates for the diploma? About six or eight, we should think; and they would probably be turned back, unless they "crammed" well first.

J. and J.

THE HISTORY OF THE ORGAN.

Intimately connected with the study and practice of architecture, especially that important section of its extent and influence included under the comprehensive term "ecclesiastical," are the history and design of an instrument, which, for extent of power, elaboration of construction, capacity as a vehicle for architectural effect, and volume and variety of tone, of quality peculiarly adapted for sacred music, is justly entitled to rank as the monarch of musical instruments, and demands more consideration and study on the part of architects than has yet been extended to it.

We hail with pleasure an elaborate work upon the organ just now published, as a service to the architect as well as the musician, as supplying an acknowledged deficiency in music history by affording valuable facts and data in connection with the subject, and in opening a wide field for further investigation and advancement in knowledge upon one or two important particulars connected with church construction.*

We purpose offering, principally from the volume before us, a brief disquisition upon the subject in question, divided into two leading heads, viz.—the history of the organ, and its position in churches; and for a more elaborate and detailed account, will refer our readers to the work itself, and the authorities that have been consulted in its compilation.

Dr. Rimbault divides the history of the organ into four grand epochs: first, before the invention of the key-board; second, after the invention of the key-board; third, the first appearance of organ-builders by profession; fourth, the founders of modern organ-building.

The Greek ὄργανον—Latin *organum*—were the origin of the scriptural term "organ," but by no means indicated the existence of the noble instrument that now bears the name. The Greeks applied the term generally to an instrument or a machine, whether musical or other, and thus *organic* became a term applied to music when *instrumental*. Vitruvius, in his tenth book, describes the difference of the words *machina* and *organum* as applied to machinery. The organ (*ougab*) is first mentioned in Genesis, where Jubal is described as the father of all such as handle the harp and organ. The type of the latter instrument was doubtless here furnished, and was probably nothing more than the rude syrinx or pipe of the god Pan:—

> "Pan primus calamos cerâ conjungere plures
> Instituit."—Virg. Buc.

Which, with the lyre, are alike the acknowledged instruments of heathen mythology and holy writ. Indeed, the well-known representation of a series of gilt tubes of progressive lengths upon the front of a modern organ recalls so forcibly and immediately the form of the humble invention of the Sylvan deity, that it is impossible to avoid recognizing whence originated the first thought.

But perhaps no better argument can be adduced of the worthlessness of interpretations of ancient terms, where the equivalent is only surmise, than the rendering by different nations of the Hebrew *nablion* and *ougab* in the above passage. The Septuagint has it ψαλτηριον και κιθαρα; the Syriac, *cithara et fides;* the Chaldean, *cithara et organum;* the Arabic, *tympanum et cithara;* the English, harp and organ; and the French, *le violon et les orgues!*

To improve upon this rude and imperfect instrument was the labour of centuries. Inserted into the top of a wooden chest—the *wind-chest*—the pipes were now placed; into this they blew through a reed—the *wind-trunk*—but as all the pipes now spoke simultaneously, they were forced to stop with the fingers the tops of those pipes intended to be silent,—which by the increase of the number of pipes soon became impossible. The *valve* was now placed under each pipe either to admit or exclude the wind. Kircher, in his "Musurgia," gives a drawing to illustrate the instrument at this stage. The valves were in an inclined position, and to open them, levers were added, connected with them by cords,—whence the modern *pull-downs*. A further increase of pipes caused an enlargement of the pipe-chest, and a better contrivance for the production of wind was devised. Thus arose a new class of instrument, called by the Greeks ὄργανον πνευματικόν.

The lines commencing—

> "Et cum multifori Tonius cui tibia buxo
> Tandem post epulas, et pocula, multicolorem
> Ventriculum sumpsit," &c.

and quoted by two or three authors, as well as Dr. Rimbault, as from Virgil (but that is an error), describe the performance upon the πιθαυλη, or *tibia utricularis*,—an instrument closely allied, as justly argued by M. Fetis, to the modern bag-pipe, but, as *we* consider, quite distinct from the *organum pneumaticum*, which doubtless is a term applying only to the early development of the instrument known to us as the organ, and not to the mere *tibia*, or *fistula*, or *calamus*, played upon by the ancient shepherds.

The enlargement of the pipes and wind-chest demanded an increase in the wind-tube; and the want of more wind occasioned the invention of bellows; and in the "Musurgia" is a drawing of an instrument thus advanced. Many portions of the modern organ being thus established, "we may," says Dr. Rimbault, "justly assign the invention of the organ to this period, and though no precise date can be given, thus much may be stated with certainty, that all these inventions date from a period before the birth of Christ."

A new power was now put in use to remedy the unsteadiness in the wind, and consequent inequality of tone caused by the smallness of the bellows, and this was the *organum hydraulicum*, or water-organ.

The account Vitruvius (lib. x.) gives of this invention, though highly interesting, leaves the subject enveloped in mystery. From the description it would seem that the water which forced the air into the pipes was pumped by men; and many argued, that as *fingers* are alluded to, *keys* must have been used. The description of Claudianus, some think, hints at the same conclusion, where he says,—

> "Intonat errante digito;"

but keys were not invented for ages afterwards. The "Musurgia" contains a long description of this instrument, according to the account of Vitruvius, and is accompanied by a drawing explanatory of same. Probably the most authentic account of this instrument is by Athenæus, who ascribes its invention to Ctesibius, of Alexandria (B.C. 200). A Contorniate medal of Valentinian, in the Vatican, bearing the head of Nero, shows, on the reverse, one of these instruments: no performer appears, but two men are engaged pumping the water by which it is worked. These contorniates were struck only from the age of Constantine to that of Valentinian, so that a higher antiquity is not thereby proved.

The mechanical operation of the water-organ is unintelligible, but that it was provided with pipes and wind-chest, and registered like the wind-organ, is certain. The water was not supposed to have produced the wind, but merely to have given it equality and power by means of counter-pressure. Burney doubts if these water-organs were any better than the remains of the invention still existing in the grottos of vineyards in Italy; but Dr. Rimbault considers they in no ways resembled each other.

To return to the pneumatic organ, M. Fetis denies its claim to extreme antiquity, proving that the early instrument to which that high-sounding title was given was nothing more than a bagpipe! nor does he discover anything to the contrary in the epigram of Julian the Apostate, in the "Anthologia Græca." The scant antiques that show this rude instrument, are but four in number, viz.: a fawn with bagpipe on an engraved cornelian, shown in Ficcaroni; a *bas relief* in Palazzo Santa-croce; a bronze in the Villa Albani; and a small statue of a shepherd in museum of the Marchese Venuti. Scaliger's derivation of πιθαυλη is not quite satisfactory; that of ασκαυλης is perfectly so; ασκος—*uter*, αυλος—*tibia*. It is worthy of remark that the sculptures upon the Arch of Titus, representing, as is supposed, the various musical instruments found in Jerusalem at its siege, do not contain among them that of the organ, which some think conclusive that they had it not.

It was probably in the fourth century that the keyboard was invented; but the early history of the organ, like that of the violin, is shrouded in uncertainty, the bow of the one and the keyboard of the other being the starting points of their after perfection; and from their invention may be traced the progress of both instruments.

At the beginning of the eighth century, the organs of the Anglo-Saxons appear to have resembled those now in use. The organ was early used in the public service of the church. Platina says Pope Vitalian first used it in 666; but Julianus says it was in use 200 years earlier. It was some time before they became common in the churches of Europe. Pepin, father of Charlemagne, first introduced singing and church ceremonies into France, and finding the want of an organ, asked one of the Byzantine emperor Constantine Copronymus, who sent him a large one, with leaden pipes, which was erected in the church of Compeigne. Soon afterwards we find them common in England. Saint Dunstan, in the reign of Edgar, erected one, described by William of Malmesbury.

Four chapters upon the construction of organs, from a treatise on "Divers Arts," by the monk Theophilus, ascribed to about the eleventh or twelfth century, and hitherto unknown to musical writers, are here given, with a translation by Mr. Hendrie; and from this account one important fact is deduced, namely, the organ described *had no keyboard*.

The first keys were few in number, and very wide,—6 or 7 inches,—and were struck down by the fist. Years of labour and patience were devoted to their improvement, and that of the bellows; and manuscripts and drawings of the period are interesting to a high degree. The first conventual and monastic organs were very small, and used only for simple melody (not harmonised), and were called "regals," from *rigabello*, and even at close of last century an officer of the Chapel Royal was termed "tuner of the regalls." Another term for it was the "portative," from its lightness; in contradis-

* "The Organ: its History and Construction." By Edward J. Hopkins, Organist of the Temple Church: preceded by a "New History of the Organ," by Edward F. Rimbault, LL.D. London: Cocks and Co. New Burlington-street. 1855.

tinction to which was the "positive," from its weight. This latter had a keyboard of full compass.

The expression, "a pair of organs," has taxed the ingenuity of many to explain, and amongst them Mr. Ashpitel, the architect, who makes it consist of "two organs conjoined with two sets of keys, one above the other: one small and called the 'choir,' the other the 'great' organ," &c. The doctor conceives Mr. Ashpitel's explanation to be the most erroneous yet given, yet, strange to say, he himself unwittingly gives weight to this explanation of the term when he speaks of "the 'small' organ which is placed before the 'great' organ in all churches where there is an organ sufficiently large to be divided into two parts," &c. This custom, then, of having *two* organs of different uses and effects would seem to be the most likely origin of a term which long prevailed after the use of the actual pair was abolished by improved construction: whence the terms, "pair of regals," "pair of virginals," &c.

Before the end of the fourteenth century all our churches and chapels were supplied with organs. The keyboard was now extended to nearly three octaves, the keys being played by the fingers, and the pedal was invented or greatly improved.

An elaborate account of native and foreign builders, instruments and improvements will be found in the history, and, amongst many "curiosities," an amusing account of the absurdities perpetrated on the exteriors, and a lament for the want of good designs.

One era in organ history must not be forgotten, — the great rebellion. An ordinance having passed in 1644 that no music but plain psalm-singing should be allowed in divine worship, and the cathedral service in short utterly abolished, the collegiate and parochial churches were stripped of their organs and ornaments: some were sold to private persons, who preserved them, some were partially, some totally destroyed, some secreted by the clergy, and a few suffered to remain!

So complete was the devastation caused by this fanaticism, that it took half a century to supply our parish churches with organs after the restoration, and but very few of the old English organs escaped the universal destruction.

A sufficient number of workmen to supply the demand for fresh organs not being obtainable in the country, it was thought expedient to invite foreign builders to settle amongst us; and the two celebrated workmen, Smith and Harris, were induced by the premiums offered to come over from Germany, and their establishment in this country commences epoch the fourth, in Doctor Rimbault's History.

Bernard Smith, commonly known as "Father Smith," brought with him from Germany two assistants, Gerard and Bernard, his nephews, and to distinguish him from them, he received the name of "Father." His first organ here was for the Chapel Royal, Whitehall, which, being hurried in the construction, was a partial failure. He afterwards made a vow never to accept work at short notice, or under price! The excellence of his organs is attested by their long duration and sweet tone. Burney, who supplies the foregoing, says nothing about his birth, parentage, and apprenticeship; nor the exact date of his arrival.

Smith was certainly in England the first year of the Restoration, and his works included some of the finest organs in the kingdom. He held the appointment of "organ-maker in ordinary" to the king, and had apartments assigned him in Whitehall, called in consequence "the Organ-builder's Workhouse." He had, however, a formidable rival to oppose in Renatus Harris, who arrived from France soon after his own settlement here. His reputation appears to have been almost as great as that of Smith; and in their famous competition for the Temple organ—the decision in which case occupied nearly a twelvemonth, party feeling was carried to the extremest lengths.

Burney must be consulted for the details of the occurrence.

Smith's success in this competition procured him the order for the organ for St. Paul's Cathedral. The work was long delayed, owing to a contention between Sir Christopher Wren and the Dean and Chapter; the former wishing the organ to be placed on one side the choir, so as not to impede the view of the building; the latter insisting on its being put up at the west end of the choir, where it was ultimately placed, Sir Christopher declaring the beauty of his building spoilt by "the d—d box of whistles!"

A list of the most important works of Smith, Harris, and the other great organ-builders of the time, both English and German, concludes Dr. Rimbault's introductory essay. We have not quoted many passages from it, as we do not observe any observations absolutely new; but we can recommend it as a useful historical sketch forming a guide to a more elaborate study of the subject.

The treatise of Mr. Hopkins is essentially a practical work, the details of which it would be impossible to enter into here.

The four great divisions, or *departments*, of the instrument, namely, the great organ, the pedal organ, the choir organ, and the swell organ, are separately and distinctly considered; and the three great divisions in which the structural portions are classed, namely,—first, the machine for the collection of the wind, and the channels for its conducting and distribution; second, the mechanism, by which the several departments are brought into use, and their stops brought under perfect control; and, third, the sound-producing parts, namely, the pipe-work, are elaborately and fully described.

We purpose in a future number to speak more particularly as to the position of organs.

A LAYMAN ON ARCHITECTURE.

ARCHITECTURAL INSTITUTE OF SCOTLAND.

AT the annual meeting of the Architectural Institute of Scotland, held on the 29th ult. the report of the council showed that the number of members now amounts to 481. It concluded by referring to the death of their late secretary in Glasgow, Mr. William Guthrie, the duties of whose office have been efficiently discharged by Mr. James Salmon, architect, Glasgow, and to the resignation of Mr. J. J. Parker, secretary in Edinburgh. The council have appointed Mr. William Miller as Interim Honorary Secretary.

The Right Rev. Bishop Terrot then delivered an interesting introductory address, of considerable length and scope.

Speaking of the hesitation with which he addressed them, the speaker said:—

"I have, however, in some degree quieted my misgivings by the consideration that, as there exists a common sense by which thousands who know nothing of formal logic do contrive, in a rough way, to arrive at true conclusion, so there may be, and I think there is, a common taste, whereby the minds of educated and thinking men do generally agree in approving or condemning any architectural work to which their attention is directed, though they may be all ignorant of the mechanical laws or the æsthetic principles which guided the architect. The existence and the workings of this common taste, the architect is bound to take into consideration, both for the sake of the public and for his own; and it is in the belief that I possess just my individual share of this common quality, and nothing more, that I now attempt to comply with the wishes of your council. I have just mentioned two points which the professional architect must have studied carefully,—1st. The necessary laws of matter; and, 2nd, Æsthetics, or the principles of the beauty of form. Of the first of these, as applied to architecture, the class of which I profess myself to be a member, is confessedly very ignorant. We do not, for example, know the strength of the various materials employed in a building, nor consequently can we say what width may safely be given to an aperture surmounted by a horizontal lintel of sandstone, of marble, of wood, or of iron. We do not know what lateral pressure a flattened or segmental arch impresses upon its abutments; and, consequently, are ignorant what force of counter-pressure, what width and solidity of buttress, is requisite for the security of the arch. But, then, it ought to be remembered by the architect that though very ignorant, we are not entirely ignorant. We know that there is a limit beyond which a horizontal beam, even of the strongest material, cannot support even itself; and, therefore, we feel a painful sense of insecurity when we have any suspicion that this limit has been approached. We know that a flattened arch of heavy materials could not be supported but by a sufficient counter-pressure; and, therefore, we feel uncomfortable under such an arch, unless we see that the means of counterpressure have been provided. Such architectural discomforts I have myself experienced. I recollect being many years ago in a concert-room at York, then newly erected, the ceiling of which was horizontal, and ostensibly composed of slabs of various richly-coloured marbles. These, if they had been what they pretended to be, could have been kept in their place only by some very powerful mechanism, of whose existence no sign appeared; and thus the effect was a painful feeling of incongruity and insecurity, while if the ceiling had really been what it assumed to be, and had been transferred to the floor, the effect might have been rich and pleasing."

As to the forms of buildings, he considered that if an architect be called upon to produce a plan for a church to contain, say a thousand sitters, and in the Pointed style, he is not confined by the rules of his art to any one form—nay, he may produce a form absolutely new, provided it be consistent with the principles of the style adopted. With reference to this point the reader continued,—

"In Blackfriars-road, London, there stands a large octagonal brick chapel, once celebrated as the station of the eccentric Rowland Hill. No one in search of the picturesque would look at it twice, for it is certainly very ugly; but then, on a comparatively small area, it is seated, I have been told, to accommodate four thousand persons, and a voice of ordinary strength is audible throughout the whole of it. Now, might not the style of the ancient chapter-house be adapted to produce all this convenience without any of this deformity? I suppose one difficulty would be the necessary expanse of roof, but what is there which cannot be effected by the judicious use of iron? If, again, the Greek or Roman style should be adopted, and I see no reason why they should be proscribed, it has struck me that the Greek cross, whether with or without a dome at the intersection, is a form well suited for our purposes, capable of much external and internal beauty, in harmony the one with the other. If built without side arches, and consequently without pier or pillars, all the congregation, in three at least of the arms, would see and hear the preacher without obstruction. As employed by the Episcopal Church, the fourth arm would be devoted to the purpose of a chancel. I know no instance of such a church in this country, but you have all seen drawings of the Isaac's Church at St. Petersburgh—that is the form to which I am now alluding; and it does appear to me that something of the kind, though, of course, on a very reduced scale, would suit our purposes in the erection of our larger city churches."

The shops in Glasgow, he thought, showed that the architects employed there must have been dealing with much more wealthy clients than the architects of most of the modern works in Edinburgh.

"Upon the whole, the effect is striking; but there appears to me some want of completeness and congruity—first, between the ostensible purpose of the building and its elaborate decoration; and next, between the nakedness of the mere shop-front, and with the plain fenestration of the intermediate parts, and the profuse richness of the upper portion. They are much superior to the variety of plaster trifles exhibited in Regent-street, London, but inferior in dignity to the mercantile buildings in New Cannon-street. These are of well-coloured brick, with white stone-facings, of good design, to the doorways and windows. This variety of material and colour, where there is a necessary and manifest break of continuity in the structure, is both reasonable and pleasing; and, upon the whole, I know not that I have seen any new range of street architecture which I prefer to New Cannon-street, between London-bridge and St. Paul's. My holiday leisure is generally spent in London, with a few visits in the country coming or going; and after inquiries after old friends, and visits to such picture galleries as are accessible, my next inquiry is for anything new in the way of architecture. And here there is something which I have in vain studied to account for—namely, that while private individuals, or commercial companies, or parochial committees, can generally get a good design for their money, Government, with the collective wealth of the country at its command, appears almost always to fail."

Speaking of the architecture of London, the Right Rev. gentleman observed:—

"Two of the largest clubs—the Carlton and the Naval and Military—suggested to me some considerations not foreign I hope to the purpose of this

address. In the Carlton there is a very striking variety of colour in the materials. The wall-face is of the ordinary building-stone, while the ornamental columns are of red granite. This appears to me a case in which variety of colour is not merely allowable, but commendable. There is here a structural discontinuity, a sudden passing of the eye from one structural form to another, and in such cases there is nothing objectionable when the change in form is accompanied by a change of colour. The effect is very different when, as in Mr. Hope's new house in Piccadilly, the red granite is introduced in unnecessary and unmeaning patches upon the flat wall. The Military and Naval presents two very extensive and richly-ornamented fronts—one towards Pall-Mall, and the other towards St. James's-square. In the elevation, we have first a rusticated basement story rising from the level of the street; then an *entresol*; and above that, a Corinthian colonnade, with a very rich frieze and cornice. But the basement and *entresol* being all above the level of the spectator, occupy one-half of the whole elevation of the building; and this, I feel assured, is far too large a portion to devote to such purposes. The effect produced is that of one complete edifice placed upon the top of another. Though I thus conclude my remarks upon the new street architecture of London with an adverse criticism on a particular case, I feel, and all must feel, that art is advancing; and that, looking only to the productions of the Georgian and Victorian ages, the architects and the public of the present day have no reason to be ashamed. And if in this department the appearance of improvement is undeniable, much more have we reason to rejoice at the still more marked advance in ecclesiastical architecture. And in reference to this, the hope for the future rests not more upon the skill and feeling exhibited by our architects, not in London only, but in every province of Great Britain, than upon the attention which is paid to the subject by all classes of the community, and the large amount even of technical knowledge possessed by many who are actively employed, but not absorbed, in other professions."

At the conclusion of his address, the Bishop urged the importance of forming an Architectural Library, containing those works which a young architect would require to consult, but which from their price he could not at the commencement of his career purchase without inconvenience and imprudence, and especially foreign works of merit, particularly of the French and German schools.

THE GLASGOW ARCHITECTURAL ASSOCIATION.

A LECTURE on the "Preparatory Training of an Architect" was delivered on the 14th ult. to the members of this association by Mr. C. H. Wilson, in which the lecturer dwelt on the necessity of education in the sister arts to all destined for or following out the architectural profession, more especially in skilful drawing, and on the advantage, indeed, of education generally, in all such branches of science as those of geology, ethnology, chemistry, and natural history. The study of landscape gardening was also pressed upon the attention of architects, and such excuses for bad or vulgar forms in architecture as the parsimony of employers was very properly reprobated.

The annual *conversazione* had been previously held on the 2nd of the month, when the retiring president, Mr. Hamilton, made the opening address, in which he directed attention to the advances in architecture effected even since the last annual meeting of the same kind. One great disadvantage under which the profession labours was dwelt on, namely, imperfect art-education amongst the people. The local Architectural Exhibition was pointed to as one of the most effectual agencies at work in the removal of this obstacle. Some strictures, however, were passed on the objects in that exhibition; but the lowering of the price of admission to the general public was approved of.*

The report was then read by the secretary, and the meeting was afterwards addressed at some length by Mr. Gildard, who, while bringing under notice the uses of glass and iron in the art, expressed a doubt that architecture is not legitimately meeting the exigencies of the age.

* Mr. Hamilton is reported to have made the following remark in allusion to the *Builder*, as one of the chief means of advancing a knowledge of architecture:—"The *Builder*, on the other hand, treated any notices of our meetings, &c. we sent, with silent contempt, not deigning to give any reason for its conduct, in its notices to correspondents or otherwise." Now there must be something incorrect in this: we do not neglect such notice when really sent to us. If it be simply meant that a newspaper containing a report was posted to us, it may have either been overlooked in the midst of the never-ending flood of newspapers which do reach us, or may not have reached us at all. Our Scottish brethren may be assured that we have the advancement of architecture and the profession too much at heart, ever willingly to neglect communications from them of public interest.

BOARD OF EXAMINERS FOR DISTRICT SURVEYORS.

SECTION 33 of the new Building Act, sets forth that

"The Institute of British Architects may from time to time cause to be examined, by such persons and in such manner as they think fit, all candidates presenting themselves for the purpose of being examined as to their competency to perform the duties of district surveyor, and shall grant certificates of competency to the candidates found deserving of the same; and no person who has not already filled the office of district surveyor, or has not already obtained a certificate of competency in pursuance of the said Act of the eighth year of the reign of Her present Majesty, chapter eighty-four, shall be qualified to be appointed to that office, unless he has received a certificate of competency from the said Institute of British Architects, or has been examined in such other manner as the said Metropolitan Board may direct, and been found competent in such examination."

At a special general meeting of the Institute of architects, held on Monday evening, the 17th, the following gentlemen, on the recommendation of the Council, were appointed to be the Board of Examiners for 1856,—the vice-presidents, the honorary secretaries, and Mr. C. Fowler, Mr. Godwin, Mr. Hesketh, Mr. Inman, Mr. Pennethorne, Mr. Pownall, and Mr. Sydney Smirke.

THE METROPOLITAN BOARD OF WORKS.

THE first sitting of the Metropolitan Parliament was held on the 19th, at Burlington House, Piccadilly, when it was resolved that the salary of the chairman should be fixed at 1,500*l.* a-year, and that he be required to devote the whole of his time to the duties of the office. The names of gentlemen desirous of becoming candidates for the office were to be received until Saturday, the 22nd inst. at twelve o'clock. The following is understood to be a list of the members of the Board:—

Edward Harrison, 82, Cornhill.
H. L. Taylor, 10, Queen-street, Cheapside.
T. H. Hall, 48, Finsbury-square.
J. A. Nicholay, 82, Oxford-street.
Thomas D'Ifanger, jun. 5, Melina-place, St. John's-wood.
William Corrie (police magistrate), 10, Gloucester-terrace, Regent's-park.
Josiah Wilkinson, 2, Paper-buildings, Temple.
F. Doulton, High-street, Lambeth.
Robert Taylor, 3, Lambeth-terrace.
H. A. Hunt, 57, Eccleston-square.
Major William Lyon, 22, Park-lane.
John Savage, 54, Thornhill-square, Islington.
W. Dennis, Twyford-villa, Caledonian-road.
W. A. H. Hows, 99, Kingsland-road.
John Ware, 2, Trafalgar-place West, Hackney-road.
Henry Burslem, 14, Kensington-gardens-terrace.
T. H. Bevan, 5, Elizabeth-terrace, Hackney-road.
Ambrose Boyson, 28, Newington-place, Kennington.
A. L. Irvine, Smyrren-lodge, Park-road, Old Kent-road.
Sir John V. Shelley, M.P. 25, Park-lane.
James Pascall, 1, Queen's-row, Pentonville.
F. Chalmers, Cheyne-row, Chelsea.
W. Hawkes, 21, High-street, Kensington.
Joseph Moreland, 18, Old-street, St. Luke's.
Edward Collinson, 95, Blackman-street.
Beriah Drew, Bermondsey-street.
Phillip Crellin, 198, Ratcliff-highway.
W. H. Dalton, 28, Cockspur-street.
W. E. Snow, 28, Tredeger-square, Mile-end.
Lewis Davis, Plumstead.
Thomas Turner, Hampstead.
G. S. Wallis, 16, Mansell-street, Goodman's-fields.
A. Wright, 55, Milbank-street, Westminster.
John Thwaites, 61, High-street, Southwark.
W. Carpmael, Streatham-hill.
George Offor, Grove-street, Hackney.
Captain Barnett, R.N. 14, Woburn-square.
R. B. Seeley, 54, Fleet-street.
Charles Few, 2, Henrietta-street, Covent-garden.
Valentine Stevens, 26, Bell-yard, Temple-bar.
Benjamin Dixon, 3, Norway-place, Commercial-road East.
Simon Knight, Blackwall.
Charles Atkins, Rushey-green, Lewisham.
William Miskin, Lower-road, Rotherhithe.

WOOLWICH ROYAL ARSENAL.

SEVERAL extensive works are being carried on here. Among them may be noticed those contracted for by Messrs. Lucas, Brothers, including the new paper factory; but what attracts most especial notice at this moment is the rapidity with which the octangular chimney-shaft has been carried up.

The bottom diameter of the shaft, which is carried up with picked stocks, and the splayed angles, with cutters, is 10 feet 9 inches from out to out: the top diameter is 4 feet 9 inches.

The shaft is surmounted with a moulded massive stone capping, 3 feet 9 inches high, worked from the Hare-hill Quarries. The batter of the shaft is 1 inch in every 3 feet 2 inches. The height from the top of the die to the summit of the shaft is 104 feet 6 inches;—making a total height from the ground line of 121 feet, and from the bottom of footings, 126 feet 6 inches. The first 25 feet 3 inches of shaft is 1 foot 10½ inches thick in mortar: the second 25 feet 3 inches of shaft is 1 foot 6 inches thick in mortar: the third 25 feet 3 inches of shaft is 1 foot 2 inches thick in mortar: the remainder is carried up in one brick, in cement.

The work was commenced on the 24th of October, and completed on the 11th of December, on which day the scaffolding was commenced to be struck. The scaffold was erected independently of the shaft, and without a putlog hole. The actual number of working days, allowing for bad weather and Sundays, was thirty-nine. The work is said to be unprecedented in the Royal arsenal, and entitles Jacobs, the foreman of the bricklayers (amongst others), to a word of praise.

THE TEMPLE GARDENS.

"A TEMPLAR" writes us that he is not so well satisfied with the treatment of the floral kingdom here as we were led to be. He says,—"Notwithstanding the smoke from the river boats, I have had an existence in the Temple for the last dozen and more years, and I have witnessed the hawthorn, the lily of the valley, and other odoriferous flowers enjoying the same privilege, and blooming much more abundantly than in the present year. I have also seen the laurus, in former years, flourishing "like a green bay-tree;" but, alas! its verdure has now faded. It is true, the rose in question (which, by the way, is a *red* one) has had to struggle for life in a confused forest of Chinese weeds with very heathenish names, supported by timber sufficient to fit out a Baltic fleet, and annexed to the said timber with strips of Joseph's coat, or other rags, the colours being so various that a casual observer might have taken the whole for an encampment *en masse* of the allied army, under a canopy of chimney-sweepers' bags;—yet, with all these disadvantages, "the red rose has not ceased to blow." If, however, they are to continue under the treatment they have hitherto received, I will not answer for their well-being. I fear they will very much resemble the old sycamore-tree, under which, it is said, was plucked the York and Lancaster, which rose, although striving for a miserable existence among a group of alien exotics, may yet be seen blooming annually in the garden of the Middle Temple. The beautiful moss-rose also is there, and, with all the *bar*barous treatment it receives, it still asserts that "England triumphant will display her proud rose," even among a host of Chinese mandarins. Now that the foreigners are cut down, I venture to say that the Christmas rose—the *helebora negra*—will be in flower in the Middle Temple Garden by the 25th instant."

MANAGEMENT OF THE INSTITUTION OF CIVIL ENGINEERS.

SIR,—Will you allow me a small space, in order to draw the attention of the members and associates of the Institution of Civil Engineers to the admirable manner in which the papers read at the Royal Institute of British Architects are published. Every member of the Institute of Architects receives, a few days after each meeting, a copy of the paper which has been read, and the discussion thereon, with the names of the speakers. The report of one evening's meeting of this session consisted of twenty-two quarto pages. At the end of each session these papers are reprinted and delivered to the members in one volume. The volume for the last session comprised 12[illegible] pages, and was illustrated with several lithographic plates. The two last reports of the Institute of Architects show a total expenditure of 700*l.* per annum, and that of the Institution of Civil Engineers amounts to upwards of 2,000*l.*; and with this expenditure the engineers have had no minutes of the proceedings of their institution for four years. I have been induced to address you on this subject in consequence of having yesterday received from the secretary of the Institution of Civil Engineers a list of the subscriptions to a Publication Fund, raised pursuant to the resolution of a meeting in December, 1853; and although by this list it appears that more than 1,300*l.* have been subscribed, no publication has yet been

issued, and the secretary now impresses upon those who have not hitherto contributed, the necessity of doing so, in order to provide funds for completing the publications now in arrear!

It appears to me that, as the architects are able to carry on their institute and publish their proceedings with an expenditure of 700*l.* per annum, the Institution of Civil Engineers might well publish their proceedings out of an expenditure of three times that sum; and you, Sir, will, I think, be conferring a great benefit on the country members of the Institution of Engineers by showing them, through your valuable publication, what is now being done by the Institute of British Architects.

ONE OF THE INSTITUTION OF CIVIL ENGINEERS.

THE FOUNTAIN FOR BATH.

VERILY there is need of some alteration in the present position of architects, for at present there is enough to keep a man of education from choosing a profession which can give him no protection against quacks and pretenders. Among the many instances which one constantly meets with which show this grievance, I would state that an application was made some months since to architects and "others," *i. e.* "men of taste," to submit designs for a fountain in Bath. About twenty-eight were sent in, principally, I conceive from amateurs, which might have been expected, as every one who can hold a pencil, thinks he can draw dolphins, tazzas, and sea gods, in endless variety. One was decided on, sent in by a cabinet-maker. I have not seen it, but of course it combines high classic feeling, with economy of outlay, and is marked with that genius which requires no education to refine or labour to develop. After some alterations and improvements have been made to it, the committee, composed as usual of those so well qualified to decide on the æsthetics of architecture, have decided, I see by a paragraph in the paper, to employ an architect "to make the working drawings and specifications, at 2½ per cent. upon the ultimate outlay, with a view to advertising for tenders," and the other 2½ is to be allowed to the author of the design; or in other words, they want an architect so far to forget himself as to do what they, with their chosen adviser, are unable to do. And so, a man who has qualified himself by study and years of labour, to practise a profession, is to be solicited to carry out the design of a tradesman, and share with him the direction and superintendence. Yet there are men "calling themselves" architects, who for the sake of a paltry 6*l.* or 7*l.* will degrade their profession, and encourage committees and others in such a shameful and unsatisfactory mode of proceeding, by undertaking the business. It remains to be seen in this case whether any man of character and respectability will be willing to place himself in such a position. A.

ACTION FOR OBSTRUCTION OF LIGHT AND AIR IN LONDON.

MERCHANT TAILORS' COMPANY *v.* TRUSCOTT.

THIS action, tried in the Court of Exchequer on the 10th, was to determine the question, whether a stack of warehouses built by the defendant opposite to the Merchant Tailors' School, in Suffolk-lane, Upper Thames-street, materially and sensibly interfered with and obstructed and diminished the light and air of the school and the residence of the head master, so as to render those premises more gloomy, less airy, and less enjoyable than previously. That all these effects had resulted from the erection in question, was established by the testimony of the masters and late masters of the school.

On the part of the defendant it was urged, that he was perfectly justified in erecting this building, which was 97 feet high, whilst that of the school was not more than 37 feet, under an ancient custom and right conferred upon all citizens building in the City of London, under a certificate from the Recorder, such custom authorising the owners of land in the City to build to any height they might think fit, with a due regard to safety.

The Lord Chief Baron told the jury that they had but one question to try, namely, did this building of the defendant's obstruct and diminish the light and air of the school? All the evidence was one way, and in the affirmative, too; therefore, upon that point, they would have no difficulty. Whether the defence as to the ancient right and custom would avail the defendant, it would be for another tribunal to determine; and, in all probability, in the end, the question would be carried up to the House of Lords, who would have to decide whether such ancient right and custom was set aside and abrogated by a recent Act.

The jury at once returned a verdict for the plaintiffs. Damages, 40*s*.

UNITED OPERATIONS FOR ENGLAND.

SIR,—I once before suggested the idea of improvements in each county, by operations for that purpose, the population of the country being so unequally distributed, some parts being almost stationary in improvement. The county of Rutland, although half the size of Middlesex, has only two small towns, and so little is its importance, that it has scarcely an event to record, the population being only equal to a large market-town. Huntingdonshire, the third in size, having 50,000 more acres than Middlesex, has a population only equal to Brighton; and so seldom do events of interest occur, that it does not require a local journal. It is not necessary that all the towns should be as large as London, or those in the manufacturing districts; but if the capital of each county was made capable of accommodating not less than 10,000 inhabitants,—care being taken to provide them with suitable residences, and a proportionate number of those institutions which conduce to the welfare of society, with other improvements in the county, the effects would probably be apparent in the improved habits of the people, and would add to the general interests of the neighbourhood and the country, by making better markets for the sale of agricultural produce, and the trade and manufactures of the country. County societies might do much that individuals cannot or will not attempt; and were they only to improve one town occasionally, or add a public building annually, it would in time produce an effect, and bring out of the present obscurity such counties as Rutland and Huntingdon. H.

Notices of Books.

VARIORUM.

Mr. LOWER has published "A Supplement" to his edition of the new "Metropolitan Building Act," containing first a series of notes on the provisions relating to party structures, dangerous structures, chimneys, &c.; and, secondly, a large portion of the City of London Sewers Acts, 1848 and 1851.*. We shall find an opportunity hereafter to refer to some of the opinions expressed: in the meanwhile let us say that all who desire to master the new Act will find Mr. Lower's supplement an assistance. ——"Ships' Compasses" is a contribution by Mr. Thomas Allan, C.E. of Edinburgh, towards arriving at the best mode of preventing the disturbance of the compass by the iron in the ship, and other causes.——Mr. Gilbert French, of Bolton, known to many of our readers, has published, in the shape of a pamphlet, "Parallel Passages from Two Tales, elucidating the Origin of the Plot of Guy Mannering." The passages (which were first made public by Mr. French so long ago as 1840, in the *Gentleman's Magazine*), show that the outline of the story was taken from a novel called "The Memoirs of an Unfortunate Young Nobleman."——Gutch's "Literary and Scientific Register for 1856" (Bogue), contains a large amount of condensed information about everything in the world, and something more.

* London: Waterlow and Sons, Parliament-street. 1855.

Miscellanea.

FALL OF A WALL, AT BOSTON. — On Thursday week, the gable end of a house — the sole remains of a block of six tenements, in Innocent-street, which have long been suffering under what may be called the Chancery blight, suddenly fell to the ground. Next evening, some men employed in removing the *débris*, unexpectedly discovered under them the mangled body of a little boy, whose mother resides in the same street. The houses in question had long been a nuisance. The dilapidated state of the buildings had been represented to the Court of Chancery, and an estimate forwarded; but nothing whatever had been done, beyond intimation that the Court had no means of procuring the required outlay.

FALL OF PART OF A MILL, AT OLDHAM. — On Monday before last, the end of a new mill at present in course of erection in New Radcliffe-street, off Henshaw-street, Oldham, fell down. The building was originally a hat manufactory, but was being converted into a cotton manufactory, and enlarged. The old foundations and part of the walls were allowed to remain, and at the end facing Radcliffe-street a new front was run up, and it is supposed to have been too slight to support the weight of the cornice and roof, for on the beams of the latter being attached, it gave way and fell into the street. The workmen got clear of the building without injury. The damage done is estimated at about 60*l.* or 70*l.*

CONTAMINATION OF WATER BY LEAD.—A Manchester correspondent informs us that he has just had a serious case of illness in his family, arising, medical men say, from the water used in the house being impregnated with lead. He has had the water tested since by analytical chemists, and the fact is thus confirmed. Our correspondent is anxious to know what to do to prevent such contamination. At present his family use rain water, collected in a large leaden cistern at the top of the house, and conveyed thence to a boiler at the back of the kitchen grate and up to another leaden cistern called a hot-watern cistern, from which it is conveyed to all parts of the house. He is recommended to have slate cisterns built within the leaden ones; but he does not know how he can avoid the use of lead pipes to convey the water to where it is required. Were it not that hot water is conducted through a portion of the pipes, leaden pipes lined with gutta percha, such as we lately noticed, might have done, and indeed, with this exception, would obviate the risk so far as regards all but the hot-water pipes. Slate cisterns within the leaden ones are unobjectionable, but the roof also must be looked to, if the rain water runs along leaden gutters; and perhaps some such coating as that invented by Mr. Wentworth Scott, and described by him lately in our columns, would do both for the cisterns and the gutters. In respect to the hot water, unless our correspondent can obtain some of those leaden pipes lined with tin, of which we also lately gave some account, we know not what he can substitute for the lead unless it be iron or tin tubes. This case, we may here note, is just another of those various instances which militate against the idea of some chemists, and in favour of that of others, and particularly of Dr. Christison, in respect to the relative danger apt to be incurred by the contact of soft water and of hard with lead.

FIRES AT ALDERSHOTT. — As was distinctly anticipated in our columns on 19th May last, where even the want of water was foretold, as well as other aggravating circumstances, such as the pitch on the roofs of the otherwise but too combustible huts pointed out,—a serious fire broke out at the Aldershott Camp, on 8th inst. when one whole block was speedily destroyed, and no water supply whatever being at hand, nor other preparations made against so imminent and perpetual a risk to wooden huts from overheated stoves, &c. sparks from the burning block set the pitched roofs of another block on fire, and the whole was also shortly in a blaze. The mischief originated in a lieutenant colonel's hut, where the stove had been overheated. It is to be feared this is not the only conflagration of the kind we are fated to hear of. One cannot but anxiously trust that better arrangements exist in the Crimea, for which Aldershott should be the teacher and exemplar.

THE WALWORTH WORKING MEN'S LECTURE AND READING ROOMS will have been in existence twelve months on the 2nd of January (Wednesday), when it is proposed to hold the annual and general meeting at the Clayton Schools, York-street. The president, Mr. W. A. Wilkinson, M.P. will take the chair. This institution has been opened to provide intellectual resources and educational aids for the adult working-classes, by means of a comfortable reading-room, open every evening (except Sunday), supplied with newspapers and periodicals; also by the delivery of lectures, on subjects of interest and utility, weekly. Classes for the study of various branches of useful knowledge are to be established. Upwards of 160 working men have become members, and the reading-room is attended by a large number of persons every evening.

A STONE COFFIN.—The sexton of the parish of Govan, near Glasgow, while digging a grave lately, came in contact with a stone coffin of large dimensions, 3 feet beneath the surface, but in a part of the churchyard not used for interment. It is about 7 feet long, the length of the cavity being 6 feet, and the width 16½ inches, depth nearly 2 feet. The exterior has been decorated with elaborate sculpture, divided into different compartments. The figures of a horseman, as if hunting, and of large quadrupeds in singular attitudes, have been traced. Some people think that this coffin may have once enclosed the remains of Constantine, King of Cornwall, who is represented in the ancient chronicles of Scotland to have been buried, in the sixth century, in a monastery built by himself at Govan!

PHOTOGRAPHIC PICTURES TAKEN AFTER THE FALL OF SEBASTOPOL.—Mr. Kilburn is exhibiting, at his gallery, in Regent-street, a number of deeply interesting photographs made by Mr. Jas. Robertson, of Constantinople, at Sebastopol, immediately after its fall. We see, for example, the interior of the Malakoff Battery, the interior of the Redan, and other of the hotly-contested points, and get clear views of the expedients to which the Russians resorted in their desperate defence. There is an interesting series of sun pictures in India, too, by Mr. Fiebig.

Railway Matters.—Several experiments have been lately tried on the Northern Railway of France, in suddenly stopping trains. One of the plans consists of a break acting by means of a heavy weight falling when a certain spring is touched, and instantly impending the progress of all the wheels. When the train has to resume its course, the weight is immediately raised by a simple piece of machinery, and the apparatus is again in a position to act. No decision had as yet been come to as to the superiority of any of these various modifications of the principle tried. ——A second experiment to test Chevalier Bonelli's apparatus for establishing a telegraphic communication between trains in motion, took place on the 7th, on the Paris and St. Cloud section of the Western Railway of France. M. Bonelli's system consists of a thin iron bar running parallel to the rails, and fixed edgeways upon insulators of earthenware, which raise it about three inches above the surface. A combination of springs establishes a communication between this bar (which the inventor calls a *line-bar*) and a telegraphic apparatus fitted to one of the waggons. In the present instance, says *Galignani*, telegraphic communications were exchanged with perfect success, and the experiment was considered to have been successful.

Stained Glass.—The following on a brass tablet, is about being put up on the east wall of St. Michael's Church, Coventry, according to the local *Standard*: —"The three easternmost windows of this apse have been filled with stained glass, to the glory of Almighty God and in memory of Adelaide, Queen Dowager, widow of his Majesty King William the Fourth. The centre window was the gift of the Right Hon. E. Ellice, M.P. as a memorial of his long connection with the city of Coventry, as one of its representatives in Parliament."——A memorial window, in St. Michael's Church, in the same city, is decided on as a mark of respect to the late Colonel Hood, who fell in the trenches before Sebastopol.——There has just been placed in the collegiate church at Wolverhampton, a memorial stained glass window to the late Duke of Wellington. The window is about 11 feet wide, and 18 feet high from the sill to the point. It is placed over the western entrance, and there are four lights. The principal portion of each is filled respectively by full-length figures of Moses, Joshua, Gideon, and David. Below the figures a leading event in the life of each is delineated. The bottom of the window presents, in mediæval letters, the inscription, together with such passages of Scripture, as "He raised up a deliverer;" "The land had rest forty years;" "He died in a good old age, full of days, riches, and honour." The window was designed and constructed by Messrs. Wailes, of Newcastle-upon-Tyne, and has been erected by subscription made in Wolverhampton.

Metropolitan Commission of Sewers.—A special court of the Metropolitan Commissioners of Sewers was held on 11th inst. on the subject of the Metropolis Local Management Act, when a deputation from the vestry of St. Pancras waited upon the commissioners, to consult them relative to arrangements for carrying on works, the management of which would in a short time be transferred from the Commissioners of Sewers to the vestry. It was the opinion of Mr. Chalmers that the district authorities could limit their own duties to the house drainage, leaving the sewerage to the Central Commissioners, but the chairman of the commission appeared to doubt this interpretation of the Acts (the Sewers Act and Metropolis Management Act), which, Mr. Garvey, one of the deputation, observed, were awkwardly dovetailed together. Mr. Sayer pointed out that while the staff required for each of the thirty-eight district localities would not fall short of 1,000*l.* the maximum expense of any central commission had never been more than 25,000*l.* instead of 38,000*l.* per annum. Ultimately, the commission resolved to instruct their officers to render any information to any committee appointed by the district boards of works under the new Act as to carrying on drainage without public injury.

A Swindling "Contractor."—At the Townhall, Little Bolton, says the *Manchester Courier*, a fellow, named Charles Collins, supposed to have recently come from the neighbourhood of Coventry, has been brought up on a charge of obtaining 22*l.* 5*s.* from Mr. Henry Edge, of Blackrod, under false pretences. He appeared at the tunnel at Blackrod as a person of consequence, one about to supply bricks for the undertaking, and on the 22nd of November made a contract with a farmer in the neighbourhood for the carting of bricks, from New Springs to the tunnel of the Liverpool Waterworks, at Blackrod, for 9*s.* per 1,000; the contractor guaranteeing to convey not less than 2,000 per day. Mr. Edge, an innkeeper, who was patronised by the "great contractor," was thus deceived, and induced on a false pretence to lend the money alluded to. The prisoner was remanded.

Another Submarine Channel Railway Project.—Mr. R. Turner, of Dublin, and Mr. T. Turner, of London, propose to cross the Channel between England and France by a tube, laid on a level bed, 96 feet under low-water, in continuation of existing lines of railway; the level bed to be made by excavating the shallows adjoining the shores, and filling in the deepest portions with the ballast found on the coasts; the tube to be secured by gravitation, and covered by a mound of ballast, after being made in docks on land, in lengths from 10 to 1,500 feet, with temporary stopped ends, and on wheeled carriages, and each rolled forward successively to its destination along the level surface, prepared for its reception. The tube is to be semi-circular, of cast and wrought iron plates, and to have a double roadway having an exterior and interior shell or case of iron, the intermediate space between being cellular, filled with a flexible bituminous substance, and the interior of the roadways to be lined with brick-work, thoroughly lighted, ventilated, and drained. The projectors are making models and plans to develope their views more fully and explain the details of their scheme.

Statue of James Watt, at Manchester.—A meeting was held at the Town-hall, Manchester, on Tuesday in last week, to originate a subscription to erect a statue to James Watt, the inventor of the steam-engine. The statue is to be a copy of the one by Chantrey, in Westminster Abbey, and is to be placed in the large area in front of the Infirmary, in company with the statues of Wellington, Peel, and Dalton. Most of the leading men of Manchester were present, and appeared to enter most heartily into the project, which originated in a suggestion from the Manchester Literary and Philosophical Society. The mayor presided. The subscriptions announced at the meeting were nineteen of 10*l.* and ten of 5*l.* each.

Monument to the late Mr. Alderman Thompson.—A monument has been erected in the parish church, Kirkby Lonsdale, to the late Mr. William Thompson, M.P. of Underley Hall. It is the work of Mr. B. Jennings, sculptor, London. The design is Grecian, and consists of a tablet supported by two brackets carved in imitation of acanthus-leaves.

The Under Drainage of Land.—The paper read at the Society of Arts on 14th inst. was "On the progress and Results of the Under Drainage of Land in Great Britain," by Mr. J. B. Denton. After the reading of the paper, some considerable discussion took place on its very important subject, and the chairman, in summing up, said that it might be considered as established that under-draining a wet soil gave a rapid descent to the water, and secured the dryness of the subsoil. No one, he thought, would deny that although shallow drainage might answer locally, the operation of deep drains had been uniformly successful; and that, although shallow drains were often taken up, there was no instance of deep ones being disturbed. No doubt there were peculiar geological formations that enabled the drainer to accomplish his object at a less expense. He trusted the subject would be taken up on another evening, and that as many would attend as possibly could, as the question would bear much further discussion. Mr. Denton, in acknowledging a vote of thanks, said that as he did not wish them to separate with an impression that he was an advocate of one universal system of draining for all soils, and under all circumstances, he must take that opportunity of repeating that he only acknowledged *one* fixed rule, and that was the *principle of depth*.

Stoves.—R. J. Stainton and E. C. Davey, of Holland-street, Blackfriars-road, have recently patented a stove, said to economise the combustion of coke, coal, or other combustible material, including inflammable gas. Excepting in the stove referred to for the combustion of gas, a fuel chamber is immediately above the grate firepan or basket, which can be charged with fuel to last a given time, according to the capacity of the stove.

Kensington Conversazioni.—We are glad to hear that these meetings are to be resumed. The directors of the proprietary school in Kensington-square having placed their large room at the disposal of the council of the society, and the latter having satisfied themselves of the fitness of the room for the effective exhibition of pictures and other works of art entrusted to their care, have determined to hold four *conversazioni*, namely, on the 10th January and 27th March, 1856, and the 8th January and 16th April, 1857. The only objection to this is the long period over which the meetings are spread. Members are now being looked for. The council list contains some excellent names.

Delaroche's Painting at the School of the Fine Arts, Paris.—It is said that the fine painting of the hemi-cycle, by M. Delaroche, has been greatly injured by a fire caused by the overheating of one of the pipes of the *calorifère*.

Cardiff Exhibition of Fine Arts, &c.—The opening of this exhibition took place on Monday week, in presence of about 300 persons. The bishop of Llandaff took the chair, and Mr. Bruce, M.P. delivered the first or introductory discourse of a series, to be given in course of the exhibition.

"Curiosities of London."—An advertisement points out Mr. Timbs's "Curiosities of London," as "ye boke for Christmas Tyde," and we take the opportunity of saying that lengthened examination of this book, so far from lessening the good opinion we first formed of it, has shown us even more forcibly the value of the immense amount of information concerning the metropolis, its buildings, antiquities, customs, and past inhabitants, which it contains. It is put together in an agreeable as well as a scholarly manner, and forms a volume of never-ending interest.

The Trade Unions, we much fear, have done great mischief, and, conducted as they now are, will do more. Hundreds of thousands of pounds have been injuriously squandered, trade has been diverted to other countries, and the advance of the working-ing classes has been retarded. They would even prevent men from working as long as they please. Take, for example, the following notice lately received, according to a local journal, by a mason in Leicester, because, being employed upon work where he had the advantage of light during only a few hours in the day, he committed the very heinous offence of filling up his time by working in his employers' yard at other times:—"This his to inform you that if you, Insisting of going to Work Gaslight after you have been working out all day, you will be consider no longer a member of the Mason Society, but buide by the consequenc.—We remain yours, In the Bond of Uneon, the Masons of Leicester."

Institution of Civil Engineers.—On the 11th inst. Mr. James Simpson, president, in the chair, the evening was occupied by a discussion upon Mr. Evan Hopkins's Paper, "On the Vertical Structure of the Primary Rocks, and the General Character of their Gold-bearing varieties."

Self-contained Houses.—A man's house should be his castle, but this will never be the case until *self-contained* houses are the order of the day. There can be no proper pride, self-respect, and cleanliness among the industrious classes, till each head of a family has a "castle" of his own. Houses can be built having two, three, four, and more rooms each. The thing is quite possible. A society must build the houses in the first place, but the industrious classes must give a hearty support. It is seldom that any of these classes possess the means of buying or building a snug house of their own, so they knock about from one street to another, and this is no good habit to acquire. If you want to make a good citizen of a man, give him a piece of land or house of his own, and you "fix" him, as the Americans say; he must become settled and respectable, whether he will or no. One of the greatest evils in London is the same as that which prevailed to such an extent in the Crimea lately. Good wages are earned, but there is a difficulty as to the mode of disposing them. A trifle might be saved weekly, but it is troublesome to put it in a savings' bank, and the interest is very small at the best. Instead, therefore, of accumulating their savings, the industrious classes too often squander them. On the contrary, give a motive; give an opportunity to save money; put a self-contained house before the eye, and you will soon find the number of thrifty citizens increasing. There is room for a grand social reform in London, and I hope to see the same begun in earnest ere long.—J. M.

The Torbanehill Mineral.—The Queen's palace, says the *Border Advertiser*, has been for some time lighted by means of this valuable substance, gas from the Torbanehill mineral being destitute of sulphur. Last year 10,000 tons of the mineral were sent to London alone. Not long ago the French Government published a report regarding this substance, which had previously lighted up the whole of the Hôtel des Invalides. This Torbanehill mineral, adds our authority, is the means now resorted to for illuminating many foreign capitals, and it is sent to the most distant parts of the globe. A ship loaded with blocks of this mineral conveys an enormous quantity of a peculiar oil, the source of the illuminating power, in the smallest possible bulk; 75 per cent. or three-fourths of the substance being latent oil, and the rest pure clay.

A new Air-pump.—An air-pump of great simplicity has just been invented and constructed by Mr. James Laing, draughtsman, Dundee. The material of which the pump is composed is cast-iron, and it dispenses with valves.

Brunetti's Model of Ancient Rome.—The Liverpool corporation have agreed to take possession of this model, which for some time past has been lying unclaimed, though the owners were advertised for both in England and America.